Docket:	:	A.15-09-005
Exhibit Number	:	ORA - ____
Commissioner	:	M. Florio
Administrative Law Judge	:	R. Haga
ORA Witnesses	:	C. Chitadje R. Keowen P. Hoglund

ORA
OFFICE OF RATEPAYER ADVOCATES

Report and Recommendations on the

Cost of Capital for

Independent Small Local Exchange Carriers

San Francisco, California

February 12, 2016

MEMORANDUM

This report was prepared by staff of the Communications & Water Policy Branch of the Office of Ratepayer Advocates ("ORA") under the general supervision of Program Manager, Chris Ungson, and Program & Project Supervisor, Richard Rauschmeier. ORA is represented in this proceeding by legal counsel, Travis Foss.

The table below identifies the names of ORA witnesses and the sections of this report for which they are responsible. A statement of qualifications for each ORA witness is presented in Attachment 1 to this report.

SECTION OF REPORT	ORA WITNESS
Executive Summary	Patrick Hoglund
Chapter 1: Capital Structure	Roy Keowen
Chapter 2: Debt	Charlotte Chitadje
Chapter 3: Return on Equity	Patrick Hoglund

In preparing this report, ORA prioritized analyses and recommendations based upon resources available. Therefore, the absence from this report of analysis or recommendation on any particular item contained within application ("A.") A.15-09-005 should not be considered as ORA's agreement with any underlying request or policy position related to that item.

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EXECUTIVE SUMMARY

In response to Ordering Paragraph ("O.P.") 2 of the California Public Utilities Commission's ("Commission") Decision ("D.") 15-06-048 the Independent Small LECs[1] filed A.15-09-005. In their application, Independent Small LECs request that the Commission adopt a ratemaking formula in this proceeding that will be utilized in the upcoming and pending rate cases. According to the applicants, this formula should involve the use of a cost of equity of 18.5% and the assumption of a 70% equity / 30% debt capital structure. The applicants further request the Commission to adopt these inputs in the instant proceeding, and then utilize the companies' actual costs of debt in individual rate cases to arrive at the overall rates of return that will be used to determine revenue requirements. The Independent Small LECs propose that for companies without any debt at the time of the rate case, the cost of debt should be 5.5%. Lastly, the Independent Small LECs request that the results of this proceeding immediately be applied to adjust the revenue requirements of one of the applicants, Kerman Telephone Company, while the remaining applicants incorporate the results of this proceeding in their rate cases in order to adjust revenue requirements.

After reviewing the application and supporting documents, ORA recommends the Commission authorize an individualized weighted average

[1] Calaveras Telephone Company (U 1004 C), Cal-Ore Telephone Co. (U 1006 C), Ducor Telephone Company (U 1007 C), Foresthill Telephone Company (U 1009 C), Kerman Telephone Co. (U 1012 C), Pinnacles Telephone Co. (U 1013 C), The Ponderosa Telephone Co. (U 1014 C), Sierra Telephone Company, Inc. (U 1016 C), The Siskiyou Telephone Company (U 1017 C), and Volcano Telephone Company (U 1019 C)

cost of capital ("WACC")[2] for each Independent Small LEC, based on: 1) the actual capital structure for the Independent Small LECs, except for those with 100% equity which would use the average capital structure of the other Independent Small LECs for ratemaking purposes, 2) ORA's forward-looking estimate of the cost of debt for each Independent Small LEC, except for those Independent Small LECs with 100% equity which should use the average cost of debt of the remaining seven Independent Small LECs for ratemaking purposes, and 3) ORA's estimate of a reasonable cost of equity of 8.79%.

Further, for the purpose of efficiency ORA recommends that the Commission deny the Independent Small LECs' request to adopt only parts of the cost of capital in this proceeding and allow other portions to be re-litigated in future general rate cases. Lastly, and for the purpose of both efficiency and equitable treatment of all applicants, the Commission should deny the request to allow the results of this proceeding to change the revenue requirement of only the Kerman Telephone Company. Either the results of this proceeding should be incorporated in pending and future general rate cases as prescribed by D. 15-06-048, or alternatively, all of the Independent Small LECs should be required to adjust revenue requirements as a result of this proceeding. To allow only Kerman Telephone this opportunity is unreasonable. A comparison of the components that comprise ORA's and the Independent Small LECs' estimates of cost of capital can be made using the attachments to this report.[3]

[2] Weighted Average Cost of Capital (WACC) is used interchangeably with Rate of Return (ROR) and Cost of Capital throughout ORA's testimony.

[3] Attachment 7 presents applicants' requests and Attachment 8 presents ORA's recommendations.

As shown in Attachment 10, the Independent Small LECs' proposed increase in authorized cost of capital, amounts to over a $10 million increase in revenue requirements and California High Cost Fund-A ("CHCF")-A subsidies. This increase is not reasonable and is not supported by current market conditions. In contrast, ORA's recommendations would result in over a $6 million decrease. The following is a summary of ORA's primary findings and conclusions.

Capital Structure

For companies with existing debt, a 5-year average of their actual capital structure should be used to determine their respective capital structures for ratemaking purposes. To mitigate potentially excessive capital costs, applicants without long-term debt should use an average of the 5-year averages of the capital structure of the applicants who do have debt as a proxy for ratemaking purposes.

Cost of Debt

Based upon currently low interest rates and the fact that the majority of the Independent Small LECs' existing debt was acquired at much higher rates, it is reasonable to use the actual debt cost of the seven Independent Small LECs with outstanding debt as a forecast of the forward-looking cost of debt for ratemaking purposes. The forward-looking debt cost for the three Independent Small LECs with no outstanding debt should be set at 4.53% which is the average cost of debt of the seven Independent Small LECs that have debt.

Return on Equity

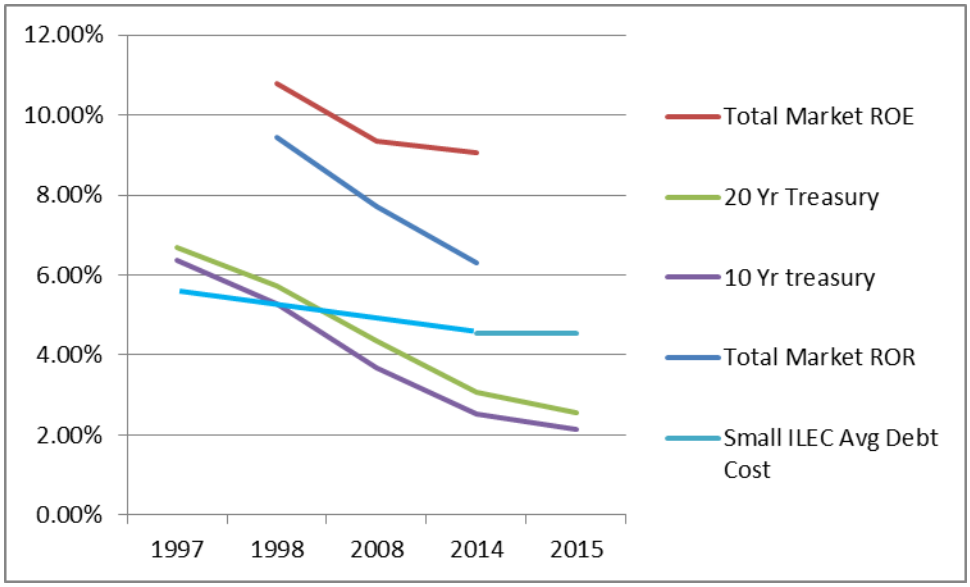
The Independent Small LECs' consultant, Mr. Balhoff, recommends in his *Pre-filed Opening Testimony of Michael J. Balhoff on Behalf of the Applicants* a cost of equity of 18.5% that ORA finds excessive and unreasonable. It is counter to most reasonable analyses of market changes that have occurred since 1997 when the Commission adopted 10% as the cost of capital (an implied average cost of equity of 12.15%).[4]

ORA focused its analysis on identifying a cost of equity that more reasonably reflects investors' expectations. Regulated utilities' adopted return on equity has been declining for the last two decades.[5] Market returns, actual costs of debt, and U.S. Treasury rates have all declined since 1997 as shown in the graph below.

[4] Table 7: WACC Decisions/Resolutions in 1997 for the Independent Small ILECs, pg. 67, "Pre-filed Opening Testimony Of Michael J. Balhoff On Behalf Of The Applicants"

[5] Regulatory Research Associates, Regulatory Focus (January 12, 2009); Moody's Investor Services, Industry Outlook: US Regulated Utilities (February 6, 2013); Moody's Investor's Service, Estimating the Cost of Capital in Today's Economic & Capital Market Environment, 41st Financial Forum, Society of Utility and Regulatory Financial Analysts (April 2009); Capital Market Conditions, Authorized Utility ROEs, and Hope and Bluefield Standards, J. Randall Woolridge, Ph.D., October 22, 2015.

Market Changes Since 1997



As detailed in Chapter 3 of this report, the results of ORA's analysis yields a recommended overall cost of equity of 8.79%.

Rate of Return

The market changes that have occurred since the Commission adopted the Independent Small LECs' current authorized 10% rate of return in 1997 are significant. This makes the Independent Small LECs' requested increase in rate of return to 14.6% appear counter intuitive, as Treasury rates are at historically low levels, costs of debt are much lower now than in 1997, and notably, the authorized rate of return has declined for regulated electric, natural gas, and water companies.[6] Since the Independent Small LECs' recommended rate of return is far in excess of a reasonable investor return for a regulated monopoly, ORA recommends the Commission adopt a rate of return specific to each

[6] For example, Edison Electric Institute, Q2 2012 Financial Update, pg 1; Regulated Research Associates, Regulatory Focus (January 12, 2009)

company based on ORA's recommendations on the capital structure, cost of debt, and cost of equity for each of the Independent Small LECs. This results in a fair rate of return in line with a reasonable investor's expectations and recognizes actual costs and risks faced by the Independent Small LECs. The resulting company specific rates of return are presented in Attachment 8. A summary of the results is provided below in Table 1.

Table 1

	Applicants' Requests					ORA Recommendations				
	C 1	C 2	C 3	C 4	**ROR**	C 5	C 6	C 7	C 8	**ROR**
	Cap % debt	Cap % equity	Debt cost	Equity cost	(C 1*C 3) +(C 2*C 4)	Cap % debt	Cap % equity	Debt cost	Equity cost	(C 5*C 7) +(C 6*C 8)
Calaveras	30.00%	70.00%	4.50%	18.50%	**14.30%**	44.18%	55.82%	4.50%	8.79%	**6.89%**
Cal-Ore	30.00%	70.00%	4.53%	18.50%	**14.31%**	43.18%	56.82%	4.53%	8.79%	**6.95%**
Ducor	30.00%	70.00%	5.10%	18.50%	**14.48%**	40.76%	59.24%	5.10%	8.79%	**7.29%**
Foresthill	30.00%	70.00%	4.77%	18.50%	**14.38%**	57.64%	42.36%	4.77%	8.79%	**6.47%**
Kerman	30.00%	70.00%	3.66%	18.50%	**14.05%**	49.76%	50.24%	3.66%	8.79%	**6.24%**
Pinnacles	30.00%	70.00%	4.53%	18.50%	**14.31%**	43.18%	56.82%	4.53%	8.79%	**6.95%**
Ponderosa	30.00%	70.00%	2.93%	18.50%	**13.83%**	38.10%	61.90%	2.93%	8.79%	**6.56%**
Sierra	30.00%	70.00%	5.53%	18.50%	**14.61%**	34.24%	65.76%	5.53%	8.79%	**7.67%**
Siskiyou	30.00%	70.00%	4.53%	18.50%	**14.31%**	43.18%	56.82%	4.53%	8.79%	**6.95%**
Volcano	30.00%	70.00%	5.20%	18.50%	**14.51%**	37.73%	62.27%	5.20%	8.79%	**7.44%**

The overall cost of capital calculated and recommended by ORA for each Independent Small LEC is reasonable, consistent with the law, and will result in savings of over $6 million in current revenue requirements, as shown in Attachment 10. The savings attributable to just ORA's recommendation for return on equity is more than $3 million.

CHAPTER 1: CAPITAL STRUCTURE

A. INTRODUCTION

One of the three components the Commission must consider in a cost of capital proceeding is capital structure. Capital structure refers to the particular distribution of debt and equity that makes up the total capital of a utility. Capital structure requires careful consideration, in conjunction with the cost of debt and the cost of equity, to ensure the financial stability of the utility, to provide investors the opportunity to earn a fair return on their investment, and to avoid excessive rates of return that are harmful to ratepayers.

In A.15-09-005, the applicants request a single, uniform, hypothetical 70% equity and 30% debt capital structure for determining the cost of capital to use for ratemaking purposes. The applicants also request that no specific capital structure be mandated for anything more than ratemaking purposes.

The justification for the applicants request is provided in the *Pre-filed Testimony of Michael J Balhoff on Behalf of the Applicants*. In his testimony, Mr. Balhoff recommends an imputed 70% to 80% equity structure, which is based on a series of Commission decisions issued in 1997. The Commission decisions from 1997 that Mr. Balhoff relies upon defined a capital structure for Independent Small LECs to be between 60% to 80% equity based on a proxy group of companies analyzed at that time. Mr. Balhoff also justifies his recommendation by presenting the average equity ratio of the applicants as 70.1%. Mr. Balhoff supports his recommendations with market data analysis that confirm his findings, and suggests a hypothetical capital structure for companies who have actual capital structures that are outside of the

Commission's previously defined reasonableness zone of 60%-80% is appropriate.

B. SUMMARY OF RECOMMENDATIONS

In developing the following recommendations, ORA reviewed the application, supporting testimony, exhibits, attachments, responses to discovery, and relevant Commission decisions.

The results of ORA's review reveal that the applicants' request to impute a hypothetical 70% equity and 30% debt capital structure is based on unreasonable assumptions. ORA presents a methodology which better reflects actual cost of capital.

For companies with existing debt, a 5-year average of each company's actual capital structure should be used to determine that company's respective capital structure for ratemaking purposes.

To mitigate potentially excessive capital costs, applicants without long-term debt should use an average of the 5-year averages of the capital structure of the applicants with reasonable capital structures as a proxy for rate setting purposes.

C. DISCUSSION

(a) Mr. Balhoff's Reliance on the Zone of Reasonableness Established in the 1997 Cost of Capital Proceeding is Unreasonable.

Mr. Balhoff's recommends a 70%-80% equity structure that is primarily based on a series of Commission decisions which set the cost of capital for the

Independent Small LECs nearly two decades ago. For example, in Decision ("D.") D.97-04-034, the Commission established a capital structure range of 60-80% equity. In his testimony, Mr. Balhoff states: "I would propose that the Commission employ a hypothetical capital structure with approximately 70% to 80% equity. I use 70% in my calculations below. This opinion relies on the Commission's previous adoption of a zone of reasonableness of 60%-80%."[7]

However, Mr. Balhoff's reliance upon the Commission's previously established zone of reasonableness is misplaced since it ignores the reason why such a reasonableness range was established at that time. The Commission did not stipulate that a 60% to 80% equity structure was reasonable on a stand-alone basis but rather established this zone based upon the specific data presented in the context of that proceeding. A review of the 1997 decision reveals that the applicants in that proceeding provided a proxy group with capital structures ranging from 60% to 80%, which was then adopted by the Commission as reasonable for ratemaking purposes. In fact, the decision states:

> "The average capital structure of the ten comparable small independent companies consisted of approximately 21% debt and 79% equity. Applicant acknowledged that its comparable companies were not perfectly comparable to applicant and concluded that a reasonable capital structure for a small telephone company is between 60% and 80% equity. Such an equity range provides applicant the opportunity to preserve its borrowing capacity so that it will have ready and continuous

[7] The *Pre-filed Testimony of Michael J Balhoff on Behalf of the Applicants,* at p.76.

access to adequate capital to meet its service requirements to customers."

In identifying a proxy group in the current proceeding, Mr. Balhoff rejects Duff & Phelps's use of Standard Industry Code (SIC) 4813: Telephone Communications,[8] because he finds them dissimilar to the Independent Small LECs.[9] Instead, he selected a proxy group from a subset of SIC 4813, for the purposes of assessing risk factors in determining the cost of equity.[10] The capital structure for each of the proxy companies used by Mr. Balhoff in the current proceeding is presented below in Table 2:

Table 2

Capital Structure of 5 Proxy Companies ($000s)[11]

Company	Long-Term Debt	Total Equity	Total Capital	Percentage of Debt	Percentage of Equity	Total Capital
Fairpoint Communications, Inc.	$ 908,190	$ (600,284)	$ 307,906	295%	-195%	100%
Telephone & Data System, Inc.	$ 1,993,586	$ 4,455,011	$ 6,448,597	31%	69%	100%
NTELOS Holding Corp.	$ 519,592	$ (32,952)	$ 486,640	107%	-7%	100%
Frontier Communications	$ 9,485,615	$ 3,657,677	$ 13,143,292	72%	28%	100%
Consolidated Communications	$ 1,356,753	$ 326,913	$ 1,683,666	81%	19%	100%
Average				**117%**	**-17%**	**100%**

The above table shows that the companies in the proxy group selected by Mr. Balhoff in the current proceeding have a much higher percentage of debt in their capital structures than the companies in the 1997 proxy group. In fact, only one company in the table above has a capital structure approaching

[8] SIC 4813 covers establishments primarily engaged in furnishing telephone voice and data communications, except radiotelephone and telephone answering services.

[9] The *Pre-filed Testimony of Michael J Balhoff on Behalf of the Applicants,* at p.56.

[10] *id,* at p.57.

[11] Data obtained from the balance sheet of each company's 2014 Annual Report. Long-term debt and total stockholder's equity used as inputs. Refer to Attachment 2 for each company's 2014 balance sheet.

70% equity. It is not reasonable for Mr. Balhoff to rely on the previously established zone of reasonableness when using the exact same methodology that produced that zone of reasonableness yields such significantly different results in the current proceeding.

(b) Actual Capital Structure Should Be Used to Determine the Cost of Capital, Except Where the Capital Structure is Unreasonable.

The applicants have had relatively stable capital structures for the last five years. To ensure that the authorized cost of capital better reflects actual costs and that shareholders do not unduly benefit at the expense of ratepayers from a hypothetical or unreasonable capital structure, the applicants' actual capital structure should be used for ratemaking purposes, and should only be adjusted in the case of 100% equity structures. Except for those companies without any debt, using the actual capital structures which have varied little over the past five years is a more reasonable method of establishing a capital structure for ratemaking purposes because it reflects actual capital costs, and results in lower costs for ratepayers.

In his testimony, Mr. Balhoff does not recommend using companies' actual capital structures unless they are "forward-looking." He states "I support this goal of determining a cost of capital that is forward-looking, and I believe that it would be unreasonable to use a company's actual structure if such a structure is inconsistent with forward-looking expectations regarding the appropriate mix of capital sources"[12] Ironically, Mr. Balhoff's reliance on the previously discussed zone of reasonableness established in the 1997 cost of capital decision is not based on any type of "forward-looking" analysis, but

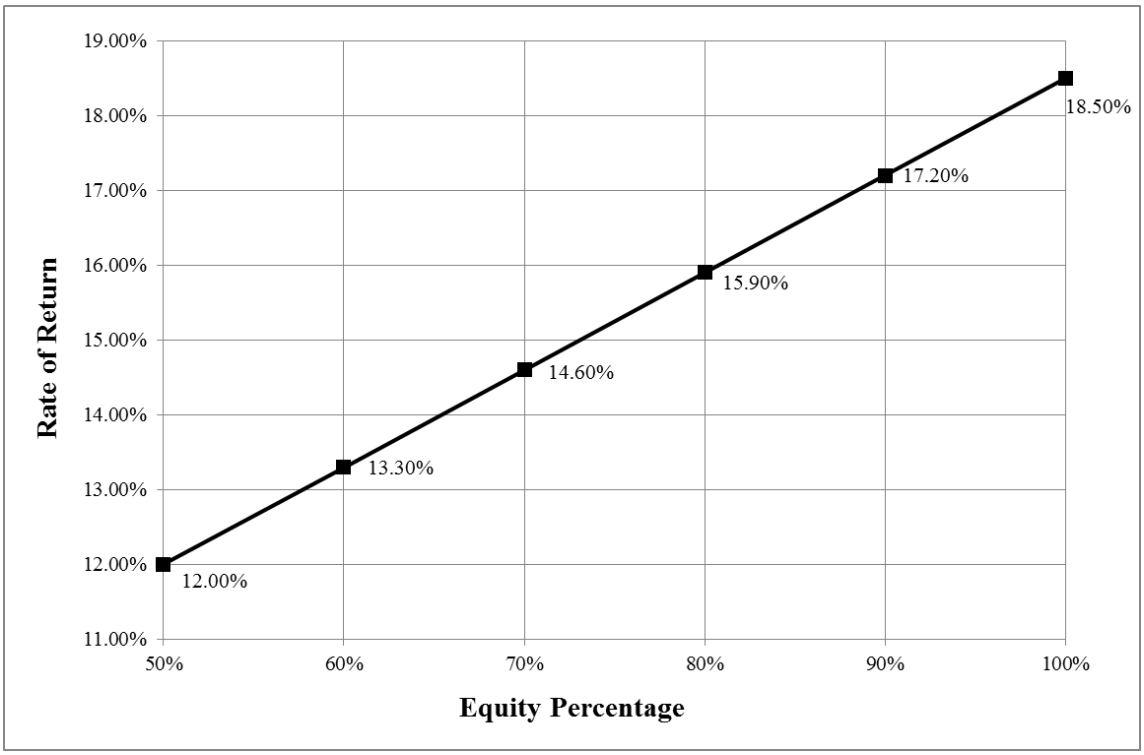
[12] The *Pre-filed Testimony of Michael J Balhoff on Behalf of the Applicants,* at p.16.

rather a misinterpretation of a nearly 20-year old decision. To be truly forward looking, a forecast is needed. A 5-year average of actual capital structure is a reasonable method to identify trends and smooth out variations from year to year so as to determine a reasonable forward-looking capital structure for ratemaking purposes.

Three of the applicants, Cal-Ore Telephone Co., Pinnacles Telephone Co. and The Siskiyou Telephone Co. are 100% equity financed. For ratemaking purposes, the capital structure of companies that are 100% equity financed are generally unreasonable because of the widespread availability of lower cost debt. The notion that 100% equity financing is inherently unreasonable for ratemaking purposes because of the excessive costs is actually explained in Exhibit 3 of the *Pre-filed Testimony of Michael J Balhoff on Behalf of the Applicants*, where it states: "The correct mix of debt and equity capital is particularly relevant for ratepayers, since equity capital costs substantially more than debt capital owing to its residual, and thus riskier, nature and to the tax deductibility of interest payments on debt."[13] To illustrate the point, Chart 1 below demonstrates the effects on the calculated rate of return as the percentage of equity increases. Chart 1 assumes the applicant's proposed debt costs of 5.5% and equity costs of 18.5%. The only change is to the equity percentage comprising the total capital structure:

[13] *MJB-Exhibit 3* at p.1.

Chart 1
The Effects of Capital Structure on Rate of Return[14]



The chart above shows a positive linear relationship between the percentage of equity in a capital structure and the calculated rate of return. Because 100% equity structures unduly burden ratepayers with additional capital costs, it is reasonable to exclude those companies with 100% equity structures when calculating the average capital structure to be used for ratemaking purposes. Table 3 below shows the 5-year average capital structure excluding those companies with 100% equity structures:

[14] See Attachment 3 for calculations.

Table 3
5-Year Average Capital Structure,
Excluding 100% Equity Structures[15]

Company	Equity	Debt	Total
Calaveras	55.82%	44.18%	100.00%
Cal-Ore	N/A	N/A	N/A
Ducor	59.24%	40.76%	100.00%
Foresthill	42.36%	57.64%	100.00%
Kerman	50.24%	49.76%	100.00%
Ponderosa	61.90%	38.10%	100.00%
Pinnacles	N/A	N/A	N/A
Sierra	65.76%	34.24%	100.00%
Siskiyou	N/A	N/A	N/A
Volcano	62.27%	37.73%	100.00%
Average	**56.80%**	**43.20%**	**100.00%**

Comparing the averages calculated in the table above to those calculated by Mr. Balhoff shows that his inclusion of 100% equity-financed companies significantly skews the average equity structure higher and thus results in a higher rate of return.[16] Excluding companies with unreasonable capital structures for ratemaking purposes lowers the average equity to 56.8% and increases the debt in the average capital structure to 43.2%.

Since the applicants' actual capital structures vary widely, ORA recommends against adopting a single uniform structure because it unfairly benefits some applicants with an excessive return on equity and reduces the return on equity for others. Considering also that the applicants' capital structures have been fairly consistent for the last five years, using the actual and

[15] See Attachment 3 for calculations.

[16] See Table 8 of the *Pre-filed Testimony of Michael J Balhoff on Behalf of the Applicants,* at p.72. Table 8 shows 70.08% (rounded to 70.1%) as the 2014 average equity ratio for the applicants.

current capital structures of those companies with debt to calculate the capital structures to be used for ratemaking purposes is a reasonable method. In fact, the reasonableness of ORA's recommendation to base the capital structure used for ratemaking on actual capital structures is implicitly supported by applicants' own testimony when Mr. Balhoff states "The rationales for using a hypothetical capital structure rather than the actual structure can be controversial as such a process requires subjective judgment."[17]

With an exception for applicants who have opted for excessively expensive, unreasonable 100% equity capitals structures, the Commission should use the applicants' actual capital structure for ratemaking purposes. As previously discussed, capital structures should be forward looking. Historically, the applicants' capital structures have remained relatively stable and there is no indication that such stability will not continue. Thus, it is reasonable to use a 5-year average of actual capital structures, as presented in the table above, for determining the cost of capital for ratemaking purposes.

It is only necessary to impute a more reasonable capital structure for the three applicants which have no debt and are therefore 100% equity financed: Cal-Ore Telephone Co., Pinnacles Telephone Co. and The Siskiyou Telephone Co. As discussed earlier in this report, 100% equity capital structures are excessively expensive to ratepayers and thus are unreasonable. Exhibit 3 of the *Pre-filed Testimony of Michael J. Balhoff on Behalf of the Applicants* states "Sometimes, the regulator will impute debt/equity proportions other than those actually employed by the utility, if the capital structure is deemed non-optimal by the regulator." For these three companies, ORA recommends using an average of

[17] The *Pre-filed Testimony of Michael J Balhoff on Behalf of the Applicants,* at p.16.

the other seven applicants' 5-year average capital structure. This results in ORA's recommendation to impute 56.8% equity and 43.2% debt for companies with no existing debt or for all companies if the Commission determines to calculate a single, uniform cost of capital, as previously presented in the table above.

(c) The Applicants' Request May Be Harmful to Ratepayers

As discussed earlier in the report, capital structures with a high percentage of equity result in a higher rate of return. The applicants request the Commission impute a capital structure of 70% equity and 30% debt. Excluding the three companies with 100% equity structures, all of the applicants' actual equity structures are less than the proposed 70% equity, some significantly so. Table 4 below shows the difference:

Table 4
Actual Equity Structure versus Proposed Equity Structure

Company	5-Year Average Equity	Proposed Equity	Difference
Calaveras	55.82%	70.00%	**-14.18%**
Cal-Ore	100.00%	70.00%	**30.00%**
Ducor	59.24%	70.00%	**-10.76%**
Foresthill	42.36%	70.00%	**-27.64%**
Kerman	50.24%	70.00%	**-19.76%**
Ponderosa	61.90%	70.00%	**-8.10%**
Pinnacles	100.00%	70.00%	**30.00%**
Sierra	65.76%	70.00%	**-4.24%**
Siskiyou	100.00%	70.00%	**30.00%**
Volcano	62.27%	70.00%	**-7.73%**

The difference between the proposed 70% and the individual applicants' actual capital structure represents additional cost to ratepayers. To illustrate the increased cost to ratepayers, Table 5 below shows the difference in the calculated rate of return when holding debt and equity costs constant and imputing a 70% equity structure versus the actual capital structure. This

demonstration uses Calaveras Telephone Company's actual capital structure and proposed cost of equity as an example:

Table 5
Cost of Capital Comparison Between
Hypothetical and Actual Capital Structures[18]

	Hypothetical Capital Structure	Interest Rate	Weighted Cost
Debt	30.00%	5.50%	1.65%
Equity	70.00%	18.50%	12.95%
Rate of Return			**14.60%**
	Actual Capital Structure (Ex. Calaveras)	**Interest Rate**	**Weighted Cost**
Debt	44.18%	5.50%	2.43%
Equity	55.82%	18.50%	10.33%
Rate of Return			**12.76%**
Difference in Calculated Rate of Return When Hypothetical 70% equity Structure is Used Instead of Actual Structure.			**1.84%**

Table 5 above shows that the ratepayers will pay capital costs above actual capital costs. The additional cost resulting from a hypothetical 70% equity structure versus an actual 55.82% equity ratio (using Calaveras as an example) results in a windfall of an additional 2.8% to Calaveras' shareholders' return on equity.[19] Below, Table 6 demonstrates the implied return on equity using the applicants' actual capital structure and debt costs. This example assumes applicants' proposed 14.6% rate of return, which is based on a 70% equity and 30% debt structure with debt costs of 5.5% and equity costs of 18.5%:

[18] Table 5 uses 5-year average of Calaveras Telephone Company's actual capital structure. See Attachment 4 for 5-year average calculation.

[19] The implied return on equity for Calaveras Telephone Company when a 14.6% rate of return (which is based on a hypothetical capital structure of 70% equity, 5.5% cost of debt and 18.5% cost of equity) is applied to their actual capital structure is 21.3%. 21.3% less 18.5% is 2.8%.

Table 6

Company	Implied Cost of Equity with Actual Capital Structure and Proposed Cost of Debt, and 14.6 Percent Rate of Return
Calaveras	21.30%
Cal-Ore	14.60%
Ducor	22.78%
Foresthill	25.97%
Kerman	25.87%
Ponderosa	21.63%
Pinnacles	15.22%
Sierra	18.83%
Siskiyou	14.96%
Volcano	20.43% [20]

Table 6, above shows that the additional cost due to imputing a 70% equity structure not only costs more to ratepayers, but the additional costs benefit shareholders exclusively through higher implied costs of equity. The applicants request an 18.5% cost of equity based upon a 70% equity structure, but when this request is considered relative to their actual capital structures, the return on equity that would be awarded is significantly higher, as shown in the table above. The exceptions are the 100% equity financed applicants whose rate of return would be equal to their cost of equity. The majority of the applicants however, will earn a windfall return on their investment at the expense of ratepayers if a capital structure of 70% equity and 30% debt is adopted.

D. CONCLUSION

The goal in setting a rate of return is to ensure the financial stability of the utility, to provide investors the opportunity to earn a fair return on their investment, and to avoid excessive rates of return that are harmful to

[20] See Attachment 5 for calculations.

ratepayers.[21] In private industry, the optimal capital structure is the structure that is the least cost to the company. For regulated companies, the regulators must simulate market conditions where possible.[22] ORA's recommendations are lower in cost while at the same time based on sound assumptions and data. The applicants' request to impute 70% equity and 30% debt is unreasonable because it is not "forward-looking" but rather based on a proxy group from a previous decision, includes unreasonable capital structures in computing averages to make the previous reasonableness zone appear reasonable, and results in harm to ratepayers. The recommendations ORA has presented are forward looking, based on reasonable capital structures, and result in greater protection against windfall returns to shareholders at the expense of ratepayers.

[21] In Decision 07-12-049, conclusion of law number 9, it states: "An ROE is set at a level of return commensurate with market returns on investments having corresponding risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility obligation.

[22] In Decision 10-10-035 at p.27, it states: "In a closely regulated market, regulation substitutes for competition and the regulator, acting as a substitute for the market, provides investors an opportunity to earn a fair and reasonable return for accepting the degree of risk presented by the regulated business."

CHAPTER 2: COST OF DEBT

A. INTRODUCTION

The cost of debt,[23] which consists of interest and issuance expenses of all long term bonds and notes issued by a company, both outstanding and projected to be issued, is a component in calculating the WACC.[24] To adequately compensate a regulated entity for its debt cost, the forecasted debt cost should take into consideration the debt cost that the regulated entity may be exposed to over an estimated time period.

Seven of the ten applicants have long term debt on their balance sheets. In the current proceeding, the applicants request the Commission to use a forward looking debt rate of 5.5% for the three Independent Small LECs currently with no debt as the debt rate to establish a target WACC if the Commission is to determine a single uniform cost of capital for all companies.

The justification of the applicants request is provided in the *Pre-filed Opening Testimony of Michael Balhoff on Behalf of the Applicants*. In his testimony, Mr. Balhoff claims that current low cost debt is not available to Small LECs and argues that the 5.5% debt cost is in line with Sierra Telephone's current cost of debt and less than the 5.6% average interest rate for the AAA corporate monthly rate from January 1997 to June 2015. ORA provides its analysis and recommendations below.

[23] The "cost of debt" and "debt cost" are used interchangeably, unless specifically noted otherwise.

[24] The Weighted Average Cost of Capital ("WACC") is the basis for most regulators' determination of a firm's required return on capital.

B. SUMMARY OF RECOMMENDATIONS

Based upon currently low interest rates and because the majority of the Independent Small LECs' existing debt was acquired at much higher rates, the actual weighted average debt cost of the seven Independent Small LECs with outstanding debt should be used to conservatively represent their forward-looking debt cost.

The forward-looking debt cost for the three Independent Small LECs with no outstanding debt should be imputed to be 4.53%, a conservative debt cost, since current lending rates available to the Independent Small LECs are below 3%.

C. DISCUSSION

Each of the seven Independent Small LECs with long term debt on their balance sheets has a portfolio of debt that was raised at different points in time with different interest rates.[25] Therefore, these Independent Small LECs' actual weighted average debt cost represents a reasonable cost of debt to use for ratemaking purposes. On the other hand, the cost of debt for the three Independent Small LECs currently with no long term debt in their balance sheets should be an imputed debt cost that is forward-looking and reasonable.

1) The Commission Should Use the Actual Cost of Debt for the Independent Small LECs with Debt

The seven Independent Small LECs with outstanding debt do not currently have any pending loan applications.[26] Thus, their debts costs are

[25] The terms "debt" and "long term debt" are used interchangeably, unless specifically noted otherwise.

[26] Applicants' response to ORA Data Request: ORA-A.15-09-005 CC3-001. See Attachment 6

known and available. In addition, Exhibit C to Cost of Capital Application shows that the Independent Small LECs have been able to obtain loans with various lenders that provide loans to rural carriers such as the Rural Utilities Services ("RUS").

In D.07-12-049, the Commission held that the latest available interest rate forecast should be used to determine embedded long term debt cost. As shown later in this chapter, current Treasury and Federal Financing Bank ("FFB") rates are lower than the actual weighted average debt cost of all Independent Small LECs with outstanding debt. However, ORA makes the conservative recommendation that the Commission should use the actual Independent Small LECs debt cost data presented in this proceeding to set the forward-looking debt rates even though the Independent Small LECs' actual debt costs are higher than the current RUS Treasury and FFB rates.

In the Table 7 ORA shows the current debt cost of each of the Independent Small LECs with debt:[27]

[27] Exhibit C to Cost of Capital Application submitted by the applicants

Table 7
Actual Cost of Existing Debt

Average Cost of Debt	
Company	**2014**
Calaveras	4.50%
Ducor	5.10%
Foresthill	4.77%
Kerman	3.66%
Ponderosa	2.93%
Sierra	5.53%
Volcano	5.20%
Average	**4.53%**

As Table 7 above indicates, 1) the average of all Independent Small LEC's weighted average debt cost is 4.53%; 2) the weighted average debt cost of each of these Independent Small LEC varies, ranging from 2.93% to 5.53%. Since Independent Small LECs' current weighted average debt costs are higher than the highest actual current Treasury and FFB rates offered for loans granted as of January 20, 2016 at 2.82% and 2.47%, respectively (shown later in this chapter), any additional debt incorporated into their debt portfolio using any current Treasury and FFB rates offered should result in a lower weighted average debt cost for each company. Nevertheless, in order to provide a conservative recommendation that can accommodate unexpected yet

significant increases in debt costs ORA recommends that the Commission use the Independent Small LECs' actual weighted average debt costs to represent forward-looking estimates for ratemaking purposes.

2) Projected Cost of Debt for the Independent Small LECs with no Debt

Balhoff's Testimony recommends that the Commission use a hypothetical debt rate of 5.5% for the three Independent Small LECs currently with no debt to approximate "a rate that might be expected in the future for any of these carriers." However, ORA proposes that a forward-looking cost of debt for these Independent Small LECs be set at no more than 4.53%. The reason for ORA's proposal is discussed below.

(a) Lower Costs of Debt are Available to the Independent Small LECs

To justify his 5.5% projected debt cost, Mr. Balhoff argues that lower costs of debt do not appear to be generally available to the Independent Small LECs.[28] According to Mr. Balhoff, lenders such as the Rural Utilities Service ("RUS") have become more cautious in lending to the Independent Small LECs.[29] However, Mr. Balhoff's arguments are not substantiated by the actual experience of the Independent Small LECs. For example, the Independent Small LECs have stated that "none of the Independent Small LECs has any pending loan application with RUS" and "none of the Independent Small LECs has had a loan request denied from January 1, 2010 to the present."[30] In

[28] the *Pre-filed Opening Testimony of Michael Balhoff on Behalf of the Applicants,* page 49.
[29] *id,* page 48.
[30] Applicants' response to ORA Data Request: ORA-A.15-09-005 CC3-001. See Attachment 6

other words, there is no actual evidence that supports Mr. Balhoff's statement that the RUS loans are not available to the Independent Small LECs.

With evidence that the Independent Small LECs have been able to obtain loans from RUS in the past and that RUS has not denied any loan request from any of the Independent Small LECs since January 1, 2010, we can conclude that RUS's current lower cost of debt is available to the Independent Small LECs.

(i) $690 Million for Loans Available

In the *2016 Explanatory Notes Rural Utilities Service*, the RUS discloses that $690 million of telecommunications loans was available for 2015. The facts indicate that 1) RUS has made loans to the Independent Small LECs in the past, 2) none of the Independent Small LECs has had a loan denied from RUS since January 1, 2010, and 3) the Independent Small LECs do not currently have any pending loan application with RUS.[31] It appears that Mr. Balhoff's statement that "RUS has become more cautious" in lending to companies like the Independent Small LECs is not substantiated by the any of the Independent Small LECs actual experience with RUS.

(1) Several Types of Financial Assistance Are Available to the Independent Small LECs

The RUS Telecommunications Infrastructure Loan Program provides three kinds of financial assistance: RUS Cost of Money Loans at current U.S. Treasury rates, Guaranteed Loans or the FFB Loans, and Hardship Loans.[32]

[31] Applicants' response to ORA Data Request; ORA-A.15-09-005 CC3-001. See Attachment 6

[32] http://www.rd.usda.gov/files/UTP_TelecomAppGuide.pdf

Of these three types of loans, the FFB Loans currently offer the lowest interest rates. According to the *2016 Explanatory Notes Rural Utilities Service*, the FFB Loans rates are substantially lower than the Cost of Money Loans rates which are set at current Treasury rates. As a result, borrowers are requesting FFB financing to keep their borrowing costs as low as possible.

(2) Current FFB and Treasury Rates

Table 8 shows the most current FFB and Treasury rates.[33]

Table 8

ISSUE DATE: 01/20/16									
01/19/16 U.S. TREASURY YIELD CURVE SEMIANNUAL RATES									
3-mo	6-mo	1-yr	2-yr	3-yr	5-yr	7-yr	10-yr	20-yr	30-yr
0.26	0.37	0.48	0.88	1.11	1.49	1.82	2.06	2.45	2.82
APPROXIMATE FFB QUARTERLY RATES*									
3-mo	6-mo	1-yr	2-yr	3-yr	5-yr	7-yr	10-yr	20-yr	30-yr
0.26	0.42	0.56	0.92	1.13	1.50	1.79	2.01	2.32	2.47

Balhoff's Testimony notes that, "the current prices for debt are today at historic low levels, due significantly to the Federal Reserve's ("Fed") bond-buying program; and there is an expectation that those rates will rise as the Fed alters its monetary policy." Mr. Balhoff then justifies his recommendation to use 5.5% as the cost for forward-looking debt as follows: "the interest rate is in line with Sierra Telephone's current cost of debt and less than the 5.6% average for the AAA corporate monthly rate from January 1997 to June 2015."

However, neither Sierra Telephone's current cost of debt nor the 5.6% average for the AAA corporate monthly rate from January 1997 to June 2015

[33] http://www.rd.usda.gov/programs-services/services/rural-utilities-loan-interest-rates

(continued on next page)

are good indicators of forward-looking overall costs of debt for the Independent Small LECs. In order for an Independent Small LEC with no debt to approach the cost of debt being recommended by Mr. Balhoff, the current Treasury and FFB rates on a 10-year loan would need to increase by 344 and 349 basis points, respectively.[34] This implied assumption, that a sudden and significant increase in Treasury rates is imminent, is contradicted by recent statements of the Chairwoman of the Federal Reserve indicating "tighten[ing] in a prudent and gradual manner."[35]

In Table 9 and Table 10 below, ORA compares Mr. Balhoff's 5.5% cost of forward-looking debt to the current Treasury and FFB rates:

Table 9
Current Treasury Rates vs Mr. Balhoff's Recommendation

Loans	Treasury Rates	Mr. Balhoff's Recommendation	Difference
10 year Loan	2.06%	5.50%	**3.44%**
20 Year Loan	2.45%	5.50%	**3.05%**
30 Year Loan	2.82%	5.50%	**2.68%**

Table 10
Current FFB Rates vs Mr. Balhoff's Recommendation

Loans	FFB Rates	Mr. Balhoff's Recommendation	Difference
10 year Loan	2.01%	5.50%	**3.49%**
20 Year Loan	2.32%	5.50%	**3.18%**
30 Year Loan	2.47%	5.50%	**3.03%**

(continued from previous page)

[34] A basis point (bp) is one hundredth of one percent. For example 100 bp=1%.

[35] http://www.wsj.com/articles/feds-janet-yellen-to-testify-before-senate-panel-1437058499

Mr. Balhoff's recommended debt cost of 5.5% simply overstates the actual cost of debt available to the Independent Small LECs going forward in the near term. In a recent decision determining authorized costs of capital for utility operations, the Commission concluded that the latest available interest rate forecast should be used to determine embedded long-term debt and preferred stock costs in cost of capital or return-on-equity ("ROE") proceedings.[36] To provide a conservative recommendation, ORA uses the current Treasury and FFB rates as the floor of ORA's estimate of debt cost, and recommends that the Commission considers setting the interest rate at *no more* than 4.53%. This is the current average cost of debt of the seven Independent Small LECs with debt. Since current average costs of debt include the costs of debt acquired in previous higher rate environments, ORA's recommendation easily accommodates any potential increase in the cost of future debt as a result of potential Federal Reserve alteration of its monetary policy.

As detailed below in Table 11 and Table 12, a rate of 4.53% is a more reasonable forward-looking cost of debt for an Independent Small LEC with no debt than the 5.5% that Mr. Balhoff recommends. In the tables below, ORA compares the current Treasury and FFB rates to the current average cost of debt of the seven Independent Small LECs with outstanding debt:

[36] D.07-12-049: Conclusion of Law No. 33.

Table 11
Current Treasury Rates vs Current Independent Small LECs Average Cost of Debt

Loans	Treasury Rates	Small LECs Average Debt Cost	Difference
10 year Loan	2.06%	4.53%	**2.47%**
20 Year Loan	2.45%	4.53%	**2.08%**
30 Year Loan	2.82%	4.53%	**1.71%**

Table 12
Current FFB Loans vs Current Independent Small LECs Average Cost of Debt

Loans	FFB Rates	Small LECs Average Debt Cost	Difference
10 year Loan	2.01%	4.53%	**2.52%**
20 Year Loan	2.32%	4.53%	**2.21%**
30 Year Loan	2.47%	4.53%	**2.06%**

As the tables above indicate, a 4.53% estimated cost of future debt would be adequate to address a sudden and significant increase in the current Treasury and FFB rates of 1) 2.47% (247 basis points) and 2.52% (252 basis points) respectively for a 10-year loan to an Independent Small LEC that currently has no debt in its balance sheet.

Factoring the possibility of a sudden significant increase in the current interest rates, ORA proposes a forward-looking cost of debt of 4.53% for the three Independent Small LECs without any actual debt. However, in the event that the Commission decides to use a different interest rate for future debt, the Commission should consider using rates as low as the current interest rates but, no higher than 4.53%, as the interest rate of 4.53% takes into consideration any possible (but unlikely) sudden significant increases in Treasury and FFB rates.

(b) A Debt Rate to Establish a Target WACC

Mr. Balhoff recommends a debt rate of 5.5% to establish a target WACC. One of the arguments that Mr. Balhoff makes to justify the 5.5% debt rate is that "it is approximately the interest rate that Sierra Telephone currently pays."

ORA's analysis reveals that applicants' proposed 5.5% debt rate to establish a target WACC implies either an unrealistic increase in interest rates or an equally unrealistic amount of additional debt that would need to be incurred.

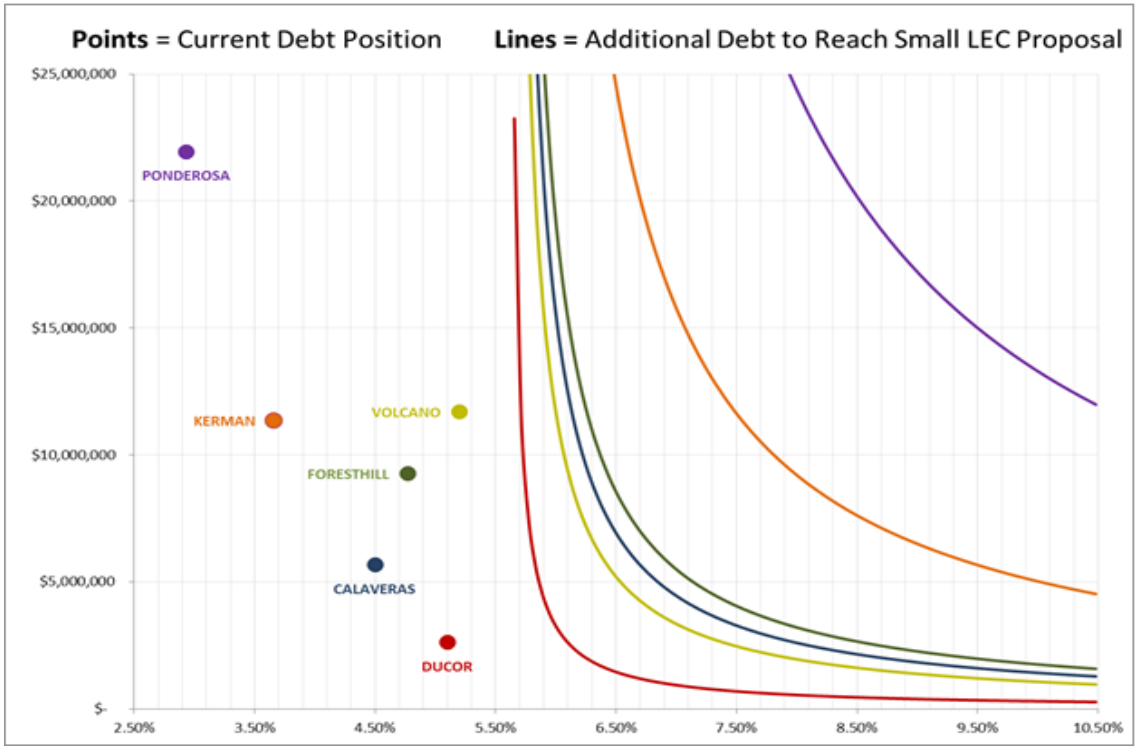
Chart 2 below represents the unrealistic scenarios that would need to occur in order for applicants' proposed 5.5% debt rate to become mathematically possible. Points in the chart reflect each Independent Small LEC's[37] current debt position in terms of each company's total outstanding debt (y-axis) and weighted cost (x-axis). The corresponding colored lines to the right of these points indicate the configuration of additional debt for each company that would be necessary to achieve the proposed 5.5% weighted average cost of total debt.

For example, the Kerman Telephone Company currently has approximately $11.3 million in outstanding debt at an average cost of 3.6% (orange point in the chart). In the unlikely event that Kerman doubled the amount of debt necessary to sustain its operations (moving horizontally to the right from its current position) lending rates would still need to increase from

[37] Because its current weighted average cost of debt is higher than the 5.5% proposed in the application, information for Sierra Telephone has been excluded.

below 3% to approximately 7.5% in order for the company's weighted average cost of all debt to equal the proposed 5.5%.

Chart 2



The above chart can be used to calculate and test the reasonableness of the numerous required scenarios for each Independent Small LEC to achieve a 5.5% weighted cost of total debt. Using another example, Ponderosa's current average debt cost of 2.9% with total debt of approximately $22 million (purple point) would require the greatest departure from reasonableness in order to reach a weighted average debt cost of 5.5%. In Table 13 below ORA calculates three of the scenarios which represent the spectrum of additional debt configurations required for Ponderosa to reach the applicants' proposal of 5.5%.

Table 13

For Ponderosa to Reach 5.5% Weighted Average Debt Cost	
Additional Debt	Interest Rate on Additional Debt
$11,743,876	10.29%
$21,592,854	8.11%
$1,023,765,806	5.56%

As can be seen in Table 13, even if interest rates climb to 5.56%, Ponderosa would still need to borrow a little over a **billion dollars** in new debt to reach the 5.5% debt rate that Mr. Balhoff recommends. The table above also shows that as the required amount of additional debt decreases, the required interest rate on the new debt will need to increase significantly in order to reach Mr. Balhoff's recommended weighted debt cost of 5.5%. For example, if Ponderosa increased its current outstanding debt by 50% (from approximately $22 million to $33 million) by issuing additional debt of $11.7 million, the interest rates on this new debt would be required to soar past 10.29% before applicants' proposal would become mathematically possible.

The Commission should not use a 5.5% debt rate if it decides to use a uniform target debt rate for all the Independent Small LECs. Instead, the Commission should use a debt rate of ***no more than*** 4.53%, which is the average debt cost of all the Independent Small LECs with debt.

D. CONCLUSION

The actual weighted average cost of debt of the Independent Small LECs with debt should be used to determine rates. The RUS lower cost of debt is available to the Independent Small LECs. The applicants' proposal of a 5.5% debt cost for the Independent Small LECs with no debt and a 5.5% target debt rate to establish a target WACC are not reasonable because 5.5% is well above the debt cost that is actually available to all the Small LECs and would require either an unreasonable amount of new debt or new debt at unreasonable interest rates in order to be mathematically possible. ORA's proposal of a 4.53% debt cost for the Independent Small LECs with no debt takes into consideration the effect of a sudden and significant increase in the Treasury and FFB rates. ORA's proposal of a target debt rate of 4.53% to establish a target WACC is conservative and reasonable compared to the 5.5% debt rate that the applicants have proposed.

CHAPTER 3: COST OF EQUITY

A. INTRODUCTION

In setting a reasonable cost of capital (also called the rate of return) the regulator generally strives to authorize a cost of capital for a regulated utility that is the lowest rate sufficient to allow the company to raise enough capital to support its efforts to provide safe and reliable service at reasonable rates. This cost of capital is the rate that the utility has the opportunity to earn on its ratebase. As noted earlier, the three key components of the cost of capital are the capital structure, the cost of debt, and the cost of equity. This chapter presents ORA's recommendations for the cost equity.

The Supreme Court provides the basis for defining the allowed fair rate of return. In *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia,* 262 U.S. 679 (1923) ("*Bluefield*"), the Supreme Court concluded that:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the general part of the country on investments in other business undertakings which are attended by the corresponding risks and uncertainties. . . . The return should be reasonable, sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise money necessary for the proper discharge of its public duties.

In *Federal Power Commission v. Hope Natural Gas Company,* 320 U.S. 391 (1944) ("*Hope*"), which expanded on *Bluefield* and emphasized that a utility's

revenues must also cover "capital costs," the Supreme Court further found that:

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . . By that standard *the return to the equity enterprises having corresponding risks*. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital. (Emphasis added.)

In *Duquesne Light Company et al. v. David M. Barasch et al.,* 488 U.S. 299 (1989), the Supreme Court reiterated the standard of *Hope* and *Bluefield* and then added important new guidelines, including "regulatory risk," which is a distinct risk to be recognized by regulators in defining a fair rate of return:

> Admittedly, the impact of certain rates can only be evaluated in the context of the system under which they are imposed. One of the elements always relevant to setting the rate under *Hope* is the return investors expect given the risk of the enterprise. *Id.,* at 603, 64 S.Ct., at 288 ("[R]eturn to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks"); *Bluefield Water Works & Improvement Co. v. Public Service Comm'n of West Virginia,* 262 U.S. 679, 692-693, 43 S.Ct. 675, 679, 67 L.Ed. 1176 (1923) ("A public utility is entitled to such rates as will permit it to earn a return . . . equal to that generally being made at the same time and in the same general part of the country on Investments in other business undertakings which are attended by corresponding risks and uncertainties"). The risks a utility faces are in large part defined by the rate methodology . . . . Consequently, a State's decision to

> arbitrarily switch back and forth between methodologies in a way which required investors to bear the risk of bad investments at some times while denying them the benefit of good investments at others would raise serious constitutional questions.

None of the above decisions or prior Commission decisions requires or prescribes a single method for determining a reasonable cost of equity. Generally, a Capital Asset Pricing Model ("CAPM"), a Discounted Cash Flow ("DCF") model, or Risk Premium ("RP") model, or some combination or variation is used in developing an estimate for the cost of equity.

ORA's return on equity calculations are based on the CAPM model. The applicants use the "Build-up Method" which is a variation of the CAPM. Again, the Commission does not require that a particular model be used for determining the return on equity.

When calculating return on equity, the CAPM will consider two numbers: the forecasted risk-free rate of interest,[38] and the "equity risk premium," which is the amount of additional return required to produce a return on equity high enough to attract the necessary capital.

In the current proceeding, applicants have requested using return on equity of 18.5% for ratemaking purposes. ORA recommends a return on equity of 8.79%.

B. SUMMARY OF RECOMMENDATIONS

In consideration of current market conditions and the favorable regulatory mechanisms which support recovery of applicant's revenue

[38] The "risk free rate" is generally defined as the yield on U.S. Treasury bonds.

requirements and reduce their risk, the applicant's requested 18.5% return on equity is unreasonable and should not be authorized or used to calculate the overall rate of return.

ORA recommends the Commission adopt a return on equity of 8.79% which when combined with ORA's other recommended cost of capital components yields an overall rate of return below that requested by the Independent Small LECs and below the current authorized rate of return of 10.00%. ORA's recommendations for individual costs of capital for the Independent Small LECs are shown in Attachment 8. The remainder of this chapter discusses the issues relevant to determining a reasonable cost of equity.

C. DISCUSSION

In their application, the Independent Small LECs have requested the Commission authorize a cost of equity of 18.5%, which represents a significant increase from the current average of 12.15% approved in the 1997 decisions.[39] As mentioned before, at first glance, one would expect the cost of equity to have decreased since 1997 as Treasury rates have significantly declined.[40] However, the Independent Small LECs rely on questionable assumptions in order to assert that that their costs of equity have increased.

Although the Commission did not specify a specific return on equity in the set of 1997 decisions and resolutions that adopted the current 10.00% cost of capital for the Small LECs, the adopted return on equity can be calculated based on known inputs. As shown in Mr. Balhoff's testimony Table 7, the adopted return on equity ranged from 10.94% to 13.06% with an average of

[39] See D.97-04-036, 97-04-034, D.97-04-035, and D.97-04-032

12.15%. In the current proceeding, Mr. Balhoff proposes a nominal increase of more than 50% in the authorized equity return.[41]

An increase as sizeable as that proposed by Mr. Balhoff requires that significant upward changes have taken place in the components of the models. However, an examination of the individual components indicates otherwise. The risk-free rate is an integral component of CAPM models and has changed noticeably. Since 1997, the yield on 20-year U.S. Treasury Bonds has declined significantly. Current rates are at historically low levels. The average yield was 6.68% in 1997. In 2014 the yield was 3.07%. The rate for 2015 had dropped even further to 2.55%. Current rates are less than half what they were in 1997. Looking over a longer timeframe, from 2006 through 2015, the yield averaged 3.73%.

The current yields and the yields over the last ten years clearly indicate that the trend in U.S. Treasury Bond yields (i.e. the risk-free rate) has been downwards since 1997. Holding all other variables fixed, one would expect the cost of equity estimates to be lower when a lower risk-free rate is employed in the financial models used to calculate costs of capital. There is no clear indication at this time that U.S. Treasury rates will return to levels that might justify increasing authorized equity returns. Furthermore, any increases that may occur would likely be small since historically, interest rate changes by the Federal Reserve have been small.[42] If rates do rise at a faster and steeper pace

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[40] http://www.federalreserve.gov/releases/H15/data.htm

[41] As discussed in Chapter 1, the implied return on equity requested by the applicants is significantly higher than the nominal request when considering the applicants' proposed capital structure.

[42] See for example https://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html

than that indicated by the Federal Reserve, the increase could be incorporated into the next cost of capital proceeding as appropriate. As a result of the aforementioned analysis, ORA's use of the recent 3-year average of the 20-Year U.S. Treasury rate of 2.91% as the risk-free rate is more reasonable as it better reflects the current and *forward-looking* low rate environment for U.S. Treasuries.

The next factor to consider is the equity risk premium Mr. Balhoff uses. In his analysis he incorporates various estimates ranging from 5.05% to 7.00%. These rates are consistent with the range of estimates generally determined for the equity risk premium.[43] ORA's estimate of the equity risk premium is 5.88%, which is taken from the FCC's 2013 report[44] and within the range of estimates used in Mr. Balhoff's analysis. These levels of equity premiums are comparable to those present when the Commission adopted the 1997 Decisions and Resolutions.

Mr. Balhoff next adds an industry-adjusted premium of between .30% and .42%.. This premium reflects the greater risk, according to Mr. Balhoff, that the Independent Small LECs face compared to the stock market overall. Similarly, and more substantially, Mr. Balhoff includes a "size premium" to his estimates. These size premiums range from 5.78% to 8.15%. These are included to account for the additional risk that Mr. Balhoff claims small companies face compared to the overall stock market. These estimates are derived from the various data sources Mr. Balhoff references. ORA does not agree with the addition of the industry and size premiums in the models. The

[43] See for example Testimony of Dr. J. Randall Woolridge On Behalf of the Division of Ratepayer Advocates Cost of Capital Applications 12-05-001; 12-05-002; 12-05-004; 12-05-005, August 27, 2012, Attachment JRW-11, pages 5-6.

[44] Prescribing the Authorized Rate of Return, Analysis of Methods for Establishing Just and Reasonable rates for Local Exchange Carriers, WC Docket No. 10-90, May 16, 2013, page 27.

FCC in its 2013 analysis also does not include a size premium. The industry and size premiums are included to reflect additional risk, be it the riskiness of the communications markets or the suggested increased small firm risk that the Independent Small LECs purportedly face compared to the overall market. However, the Small LECs, by the nature of the Universal Service Fund ("USF") and the CHCF-A, are shielded from the fluctuations in revenue that are associated with risk. In other words, the USF and CHCF-A, provide known levels of revenue for the Small LECs. These revenues are derived from the revenue requirements adopted in general rate cases and are updated annually. Therefore, a significant portion of business risk, the variability in revenues, is mitigated. Industry risk and size risk are therefore also mitigated and should not be incorporated into the cost of equity estimates.

Table 14 below shows ORA's estimates for its CAPM model and the average for Mr. Balhoff's CAPM/Buildup model.

Table 14

ROE Estimates	Avg Balhoff	ORA CAPM
Risk-free rate	5.80%	2.91%
Equity risk premium	6.39%	5.88%
Base or market equity cost of capital	12.19%	8.79%
Industry-adjusted premium	0.377%	n/a
Size-premium to CAPM (1963-2014)	6.37%	n/a
Total Estimated cost of equity	18.94%	8.79%

As can be seen from the table above there are three primary differences between Mr. Balhoff's estimates and ORA's. The first is that ORA uses a lower estimate of the risk-free rate to reflect current historically low U.S. Treasury yields. Second, for the reasons described above, ORA does not include an industry-adjusted premium. Thirdly, and the largest difference, ORA does not include a size premium.

In the *Pre-filed Opening Testimony of Michael J. Balhoff on Behalf of the Applicants*, Mr. Balhoff provides an explanation of the methods and models he employed in formulating his estimate for the return on equity. His estimate is based on the Buildup Method (a variation of the Risk Premium method that relies on CAPM concepts) and he further employs transactional data from mergers and acquisitions of other ILECs that are not in this proceeding to confirm the reasonableness of his estimate.

The Commission should disregard Mr. Balhoff's inclusion of the transactional data and the conclusions Mr. Balhoff draws from it. ORA finds two primary concerns with the transactional data. The first is out of the total number of 140 Merger and Acquisition ("M&A") transactions included in the study sample, only 24 included price data. This is simply too small a sample to be relied upon. The 80% of the transactions we do not have price data for could drastically alter any conclusions derived from the data. The second concern is that the M&A transactions represent market values of the enterprise. Traditionally, regulatory ratemaking, specifically the determination of revenue requirements incorporates the book value of ratebase and the forecasted level of expenses, and an authorized rate of return. Book value and market value of a Small LEC can be vastly different.

1) Independent Small LEC Earned Return On Equity ("ROE") History

The Independent Small LECs have shown the ability to earn their authorized rate of return over the last five years. On average, over the last five years, they have earned an average rate of return of 9.449%.[45] This is very close to the applicants' authorized rate of return of 10.00%. This results in an

average return on equity of 11.973%. Clearly, the Independent Small LECs have, on average, earned nearly their authorized rates of return and return on equity.

2) Proxy Group Return On Equity

ORA reviewed recent financial data for a proxy group of communications firms. The proxy group is taken from the FCC's report *Prescribing the Authorized rate of Return, Analysis of Methods for Establishing Just and Reasonable rates for Local Exchange Carriers*. The group of firms is shown in Attachment 9 Notable from this group's financials is the average earned return on equity of 6.43%. Actual earned return on equity at this level suggests that ORA's estimate for return on equity in this proceeding is more reasonable than Mr. Balhoff's. For reference, ORA also looked at data collected by Professor Aswath Damordan of NYU. For the Telecommunications Services market a return on equity of 8.31% was calculated for 2014. This return on equity is substantially closer to ORA's estimate and provides further assurance that ORA's estimate is more reasonable than Mr. Balhoff's under present market conditions.

3) Equity Risk Premium

Mr. Balhoff uses estimated equity risk premiums ranging from 5.05% to 7.00%. One way to estimate the equity risk premium is to compare the mean returns on bonds and stocks over long historical periods. Measured in this manner, the equity risk premium has been in the 5% to 7% range.[46]

(continued from previous page)

[45] See Attachment 11

[46] See for example Duff & Phelp's 2015 Valuation Handbook Guide to Cost of Capital

On May 16, 2013, the Wireline Competition Bureau of the Federal Communications Commission issued a Staff Report titled "Prescribing The Authorized Rate of Return". In this report the average market (equity) premium for the period 1928 – 2012, was shown to be 5.88%. Additionally, a review of recent estimates of the equity risk premium range from 4.51%[47] to 6.21%[48].

ORA recommends using an equity risk premium of 5.88%. This is reasonable because it falls within the range of historical analysis, while moving closer to more recent market returns. ORA notes also that the average implied equity premium from the 1997 decisions was 5.13%.[49] The average equity risk premium of Mr. Balhoff's models is 6.30%.

(i) Size Premium

As discussed earlier, Mr. Balhoff includes a size premium of 5.78% to 8.15%. However, as rate regulated entities, supported by both state and federal mechanisms to support revenues, the risk associated with the Small LECs' size is moot. Notably, the FCC concluded in its 2013 analysis, "Therefore, we do not recommend adding a risk premium based on size for the cost of equity."[50] Furthermore, even if size was determined to be a relevant factor, it is quite possible that the relatively smaller size of the ILECs would afford them an opportunity to more nimbly adjust strategy and budgets in response to competitive forces, changing customer demands, and technological

[47] The Equity Risk Premium in 2015, John R. Graham, Campbell R. Harvey, May 29, 2015

[48] http://pages.stern.nyu.edu/~adamodar/New_Home_Page/

[49] avg. implied premium =(avg. ROE) – (avg. Treasury rate) = 12.15% - 7.02% = 5.13%

[50] Prescribing the Authorized Rate of Return, Analysis of Methods for Establishing Just and Reasonable rates for Local Exchange Carriers, WC Docket No. 10-90, May 16, 2013, page 28.

innovations, thereby lowering risk. Finally, the existence of the USF and CHCF-A offset the majority of revenue risk and thus eliminate the need for any adjustment for size.

(ii) Industry Risk Premium

Mr. Balhoff's recommendation to include an industry risk premium adjustment of between 5.78% and 8.15% is based on analysis of companies in SIC Code 4813. The Standard Industrial Classification ("SIC") is a system for classifying industries. SIC Code 4813 includes telephone communications companies. ORA does not include an explicit industry risk adjustment in its estimate since not all the firms included in the 4813 SIC Code are regulated telephone companies and as noted earlier, due to the revenue support provided by the USF and CHCF-A, the Independent Small LECs risk is mitigated.

Since 1997, the year current Independent Small LECs authorized rates of return were adopted, the authorized rates of return for U.S. regulated electric, natural gas, and water utilities have *declined*.[51] The same market forces, lower Treasury rates and lower debt costs that have resulted in lowered authorized rates of return for other regulated utilities are applicable to the Independent Small LECs. ORA's estimated return on equity is consistent with the downward rate of return trend in other regulated industries. Mr. Balhoff's recommended return on equity is about 50% above current adopted levels and

[51] Regulatory Research Associates, Regulatory Focus (January 12, 2009); Moody's Investor Services, Industry Outlook:US Regulated Utilities (February 6, 2013); Moody's Investor's Service, Estimating the Cost of Capital in Today's Economic & Capital Market Environment, 41st Financial Forum, Society of Utility and Regulatory Financial Analysts (April 2009); Capital Market Conditions, Authorized Utility ROEs, and Hope and Bluefield Standards, J. Randall Woolridge, Ph.D., October 22, 2015.

results in a cost of capital 46% greater than the current authorized 10.00%. This is simply unsupportable by the data.

D. CONCLUSION

Mr. Balhoff's recommended cost of equity of 18.5% is excessive and therefore unreasonable. It is counter to all reasonable analysis of market changes that have occurred since 1997 when the Commission adopted 10.00% as the cost of capital (an average of 12.15% cost of equity) for the Independent Small LECs.

ORA has focused its analysis on identifying a cost of equity that reflects reasonable investors' expectations. ORA's model yields an overall cost of equity recommendation of 8.79%. The overall cost of capital calculated and recommended by ORA is fair and reasonable and will result in savings of over $6 million in revenue requirements.

QUALIFICATIONS AND PREPARED TESTIMONY OF CHARLOTTE CHITADJE

Q1. Please state your name, business address, and position with the California Public Utilities Commission (Commission).

A1. My name is Charlotte Chitadje and my business address is 505 Van Ness Avenue, San Francisco, California. I am a Public Utility Regulatory Analyst in the Communications Branch of the Office of Ratepayer Advocates.

Q2. Please summarize your education background and professional experience.

A2. I received a Bachelor of Science degree in Business Administration with a concentration in Accounting from San Francisco State University in 2004. I received my Professional License as a Certified Public Accountant in the State of California in 2009. I joined the Office of Ratepayer Advocates (ORA) – Communications and Water Policy Branch, in September 2014. Prior to joining ORA, I was a Public Utilities Financial Examiner IV in the Division of Water and Audits –Utility Audit, Finance and Compliance Branch at the Commission, where I worked from April 2012 to September 2014. Before coming to the Commission, I worked from 2004 to March 2012 as a Corporations Examiner in the Department of Corporations.

I attended the Michigan State University Institute of Public Utilities: Basics of Utility Regulation and Ratemaking Seminar in June 2014.

Q3. What is your responsibility in this proceeding?

A3. I am the author of Chapter 2: Debt.

Q4. Does this conclude your prepared direct testimony?

A4. Yes, it does.

QUALIFICATIONS AND PREPARED TESTIMONY OF

ROY KEOWEN

Q.1 Please state your name and business address.

A.1 My name is Roy Keowen. My business address is 505 Van Ness Avenue, San Francisco, California, 94102.

Q.2 By whom are you employed and in what capacity?

A.2 I am employed by the California Public Utilities Commission (CPUC) in its Office of Ratepayer Advocates (ORA) as a Financial Examiner II.

Q.3 Briefly describe your pertinent educational background.

A.3 I graduated from the California State University, Los Angeles with a degree in Business Administration, Option in Accounting.

Q.4 Briefly describe your professional experience.

A.4 Prior to joining the CPUC, I worked as a Tax Auditor at the Board of Equalization for 1 year. In my experience at the CPUC, I have worked on 3 general rate cases where I reviewed and prepared testimony for the balancing and memorandum accounts and 1 general rate case where I prepared testimony for operating expenses. I attended the Michigan State University Institute of Public Utilities: Basics of Utility Regulation and Ratemaking Seminar in June 2014.

Q.5 What is your responsibility in this proceeding?

A.5 I am responsible for providing testimony related to the applicants' capital structure.

Q.6 Does that conclude your testimony?

A.6 Yes, at this time.

QUALIFICATIONS AND PREPARED TESTIMONY OF

PATRICK E. HOGLUND

Q.1. Please state your name and business address.

A.1. My name is Patrick E. Hoglund. My business address is 505 Van Ness Avenue, San Francisco, California.

Q.2. By whom are you employed and in what capacity?

A.2. I am employed by the California Public Utilities Commission - ORA Communications and Water Policy Branch - as a Senior Utilities Engineer. My current assignment is within ORA – Communications and Water Policy Branch. I am assigned to various communications related matters.

Q.3. Please briefly describe your educational background and work experience.

A.3. I am a graduate of the University of California, Berkeley, with a Bachelor of Science Degree in Industrial Engineering and Operations Research. I am also a graduate of the University of Rochester, William E. Simon School of Business with a Master of Business Administration Degree with concentrations in Finance and Corporate Accounting. I am a licensed professional Industrial Engineer.

I have been employed by the California Public Utilities Commission since 2005. From July 1999 through August 2004, I was a Senior Rates Analyst at Pacific Gas and Electric Company,

where I worked on a variety of revenue requirements issues related to natural gas. From 1990 through 1997, I was employed by the California Public Utilities Commission. During this time I worked on small water utility rate cases, large water utility rates cases, and also worked in the Telecommunications and Energy Branches of the former Commission Advisory and Compliance Division, as well as in the Division of Ratepayer Advocates.

I have completed regulatory training provided by NARUC in 2005 and a regulatory accounting seminar provided by Financial Accounting Institute in 2009. I have prepared testimony in numerous water rate case proceedings. Most recently in A.12-07-005, A.10-07-007, A.09-01-013, and A.09-07-001.

Q.4. What are your responsibilities in this proceeding?

A.4. I am ORA's project lead in this proceeding. I am responsible for the overall preparation of testimony and specifically the Executive Summary and chapter titled "Return on Equity".

Q.5. Does this conclude your prepared testimony?

A.5. Yes, it does.

Attachment 2

Selected Financial Statement Data for Capital Structure Calculation of Proxy Group Selected from Standard Industry Classification (SIC) 4813

Company	Long-Term Debt	Total Equity	Total Capital	Percentage of Debt	Percentage of Equity	Total Capital
Fairpoint Communications, Inc.	$ 908,190	$ (600,284)	$ 307,906	295%	-195%	100%
Telephone & Data System, Inc.	$ 1,993,586	$ 4,455,011	$ 6,448,597	31%	69%	100%
NTELOS Holding Corp.	$ 519,592	$ (32,952)	$ 486,640	107%	-7%	100%
Frontier Communications	$ 9,485,615	$ 3,657,677	$ 13,143,292	72%	28%	100%
Consolidated Communications	$ 1,356,753	$ 326,913	$ 1,683,666	81%	19%	100%
Average				**117%**	**-17%**	**100%**

FAIRPOINT COMMUNICATIONS, INC. AND SUBSIDIARIES
Consolidated Balance Sheets
(in thousands, except share data)

	December 31, 2014	December 31, 2013
Assets:		
Cash	$ 37,587	$ 42,700
Restricted cash	—	543
Accounts receivable, net	71,545	89,248
Prepaid expenses	25,360	26,552
Other current assets	5,406	3,876
Deferred income tax, net	7,638	18,250
Total current assets	**147,536**	**181,169**
Property, plant and equipment, net	1,213,729	1,301,292
Intangible assets, net	94,879	105,886
Debt issue costs, net	5,949	7,101
Restricted cash	651	651
Other assets	3,214	3,799
Total assets	**$ 1,465,958**	**$ 1,599,898**
Liabilities and Stockholders' Deficit:		
Current portion of long-term debt	$ 6,400	$ 6,400
Current portion of capital lease obligations	627	1,445
Accounts payable	62,985	37,876
Claims payable and estimated claims accrual	216	256
Accrued interest payable	9,978	9,977
Accrued payroll and related expenses	25,218	34,897
Other accrued liabilities	47,147	55,994
Total current liabilities	**152,571**	**146,845**
Capital lease obligations	962	447
Accrued pension obligations	212,806	153,534
Accrued post-retirement healthcare obligations	735,351	584,734
Deferred income taxes	35,231	85,948
Other long-term liabilities	21,131	25,864
Long-term debt, net of current portion	908,190	911,722
Total long-term liabilities	**1,913,671**	**1,762,249**
Total liabilities	**2,066,242**	**1,909,094**
Commitments and contingencies (*See* Note 18)		
Stockholders' deficit:		
Common stock, $0.01 par value, 37,500,000 shares authorized, 26,710,569 and 26,480,837 shares issued and outstanding at December 31, 2014 and 2013, respectively	267	264
Additional paid-in capital	516,080	512,008
Retained deficit	(798,008)	(661,689)
Accumulated other comprehensive loss	(318,623)	(159,779)
Total stockholders' deficit	**(600,284)**	**(309,196)**
Total liabilities and stockholders' deficit	**$ 1,465,958**	**$ 1,599,898**

See accompanying notes to consolidated financial statements.

Telephone and Data Systems, Inc.
Consolidated Balance Sheet—Assets

December 31, (Dollars in thousands)	2014	2013
Current assets		
Cash and cash equivalents	$ 471,901	$ 830,014
Short-term investments	—	50,104
Accounts receivable		
Due from customers and agents, less allowances of $41,431 and $63,690, respectively	548,537	551,611
Other, less allowances of $1,141 and $1,914, respectively	135,144	179,503
Inventory, net	273,707	244,560
Net deferred income tax asset	107,686	106,077
Prepaid expenses	86,506	87,920
Income taxes receivable	113,708	2,397
Other current assets	29,766	35,151
	1,766,955	2,087,337
Assets held for sale	103,343	16,027
Investments		
Licenses	1,453,574	1,423,779
Goodwill	771,352	836,843
Franchise rights	244,300	123,668
Other intangible assets, net of accumulated amortization of $133,823 and $112,752, respectively	64,499	71,454
Investments in unconsolidated entities	321,729	301,772
Other investments	508	641
	2,855,962	2,758,157
Property, plant and equipment		
In service and under construction	11,194,044	11,239,804
Less: Accumulated depreciation and amortization	7,347,919	7,361,660
	3,846,125	3,878,144
Other assets and deferred charges	334,554	164,482
Total assets	$ 8,906,939	$ 8,904,147

The accompanying notes are an integral part of these consolidated financial statements.

Telephone and Data Systems, Inc.
Consolidated Balance Sheet—Liabilities and Equity

December 31, (Dollars and shares in thousands)	2014	2013
Current liabilities		
Current portion of long-term debt	$ 808	$ 1,646
Accounts payable	387,125	496,069
Customer deposits and deferred revenues	324,318	289,445
Accrued interest	7,919	6,673
Accrued taxes	46,734	70,518
Accrued compensation	114,549	115,031
Other current liabilities	181,803	212,374
	1,063,256	1,191,756
Liabilities held for sale	21,643	—
Deferred liabilities and credits		
Net deferred income tax liability	941,519	862,975
Other deferred liabilities and credits	430,774	458,709
Long-term debt	1,993,586	1,720,074
Commitments and contingencies		
Noncontrolling interests with redemption features	1,150	536
Equity		
TDS shareholders' equity		
Series A Common and Common Shares		
Authorized 290,000 shares (25,000 Series A Common and 265,000 Common Shares)		
Issued 132,749 shares (7,179 Series A Common and 125,570 Common Shares) and 132,711 shares (7,166 Series A Common, and 125,545 Common Shares), respectively		
Outstanding 107,899 shares (7,179 Series A Common and 100,720 Common Shares) and 108,757 shares (7,166 Series A Common, and 101,591 Common Shares), respectively		
Par Value ($.01 per share) ($72 Series A Common and $1,255 Common Shares)	1,327	1,327
Capital in excess of par value	2,336,511	2,308,807
Treasury shares at cost:		
24,850 and 23,954 Common Shares, respectively	(748,199)	(721,354)
Accumulated other comprehensive income (loss)	6,452	(569)
Retained earnings	2,330,187	2,529,626
Total TDS shareholders' equity	3,926,278	4,117,837
Preferred shares	824	824
Noncontrolling interests	527,909	551,436
Total equity	4,455,011	4,670,097
Total liabilities and equity	$8,906,939	$8,904,147

The accompanying notes are an integral part of these consolidated financial statements

NTELOS Holdings Corp.
Consolidated Balance Sheets

(In thousands, except par value per share amounts)	December 31, 2014	December 31, 2013
ASSETS		
Current Assets		
Cash	$ 73,546	$ 88,441
Restricted cash	2,167	2,167
Accounts receivable, net	43,668	37,741
Inventories and supplies	18,297	23,962
Deferred income taxes	24,770	10,650
Prepaid expenses	13,543	15,891
Other current assets	4,626	4,916
	180,617	183,768
Assets Held for Sale	64,271	—
Securities and Investments	1,522	1,499
Property, Plant and Equipment, net	289,947	319,376
Intangible Assets		
Goodwill	63,700	63,700
Radio spectrum licenses	44,933	131,834
Customer relationships and trademarks, net	5,084	6,985
Deferred Charges and Other Assets	18,474	9,089
TOTAL ASSETS	$ 668,548	$ 716,251
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current Liabilities		
Current portion of long-term debt	$ 5,816	$ 5,410
Accounts payable	24,541	24,748
Dividends payable	—	9,034
Advance billings and customer deposits	14,553	14,055
Accrued expenses and other current liabilities	27,153	26,344
	72,063	79,591
Long-Term Debt	519,592	484,956
Retirement Benefits	25,209	11,995
Deferred Income Taxes	39,620	62,893
Other Long-Term Liabilities	45,016	33,023
	629,437	592,867
Commitments and Contingencies		
Equity		
Preferred stock, par value $.01 per share, authorized 100 shares, none issued	—	—
Common stock, par value $.01 per share, authorized 55,000 shares; 21,634 shares issued and 21,616 shares outstanding (21,519 shares issued and 21,510 shares outstanding at December 31, 2013)	214	214
Additional paid in capital	28,663	44,462
Treasury stock, at cost, 18 shares (9 share at December 31, 2013)	(285)	(147)
Accumulated deficit	(53,634)	—
Accumulated other comprehensive loss	(9,090)	(1,246)
Total NTELOS Holdings Corp. Stockholders' Equity/(Deficit)	(34,132)	43,283
Noncontrolling Interests	1,180	510
	(32,952)	43,793
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)	$ 668,548	$ 716,251

See accompanying Notes to Consolidated Financial Statements.

FRONTIER COMMUNICATIONS CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2014 AND 2013
($ in thousands, except for share amounts)

	2014	2013
ASSETS		
Current assets:		
Cash and cash equivalents	$ 682,134	$ 880,039
Accounts receivable, less allowances of $71,571 and $71,362, respectively	614,164	479,210
Prepaid expenses	60,598	68,573
Income taxes and other current assets	129,196	191,017
Total current assets	1,486,092	1,618,839
Property, plant and equipment, net	8,566,048	7,255,762
Goodwill	7,205,357	6,337,719
Other intangibles, net	1,499,864	1,214,932
Other assets	216,669	208,232
Total assets	$18,974,030	$16,635,484
LIABILITIES AND EQUITY		
Current liabilities:		
Long-term debt due within one year	$ 297,622	$ 257,916
Accounts payable	379,255	327,256
Advanced billings	179,058	137,319
Accrued other taxes	80,090	66,276
Accrued interest	214,226	188,639
Pension and other postretirement benefits	123,794	111,713
Other current liabilities	238,031	212,468
Total current liabilities	1,512,076	1,301,587
Deferred income taxes	2,938,907	2,417,108
Pension and other postretirement benefits	1,140,677	725,333
Other liabilities	239,078	262,308
Long-term debt	9,485,615	7,873,667
Equity:		
Common stock, $0.25 par value (1,750,000,000 authorized shares, 1,002,469,000 and 999,462,000 outstanding, respectively, and 1,027,986,000 issued, at December 31, 2014 and 2013)	256,997	256,997
Additional paid-in capital	3,990,160	4,321,056
Retained earnings	108,754	76,108
Accumulated other comprehensive loss, net of tax	(404,328)	(260,530)
Treasury stock	(293,906)	(338,150)
Total equity	3,657,677	4,055,481
Total liabilities and equity	$18,974,030	$16,635,484

The accompanying Notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED COMMUNICATIONS HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(amounts in thousands, except share and per share amounts)

	December 31, 2014	December 31, 2013
ASSETS		
Current assets:		
Cash and cash equivalents	$ 6,679	$ 5,551
Accounts receivable, net of allowance for doubtful accounts	77,536	52,033
Income tax receivable	18,940	9,796
Deferred income taxes	13,374	7,960
Prepaid expenses and other current assets	17,616	12,380
Total current assets	134,145	87,720
Property, plant and equipment, net	1,135,333	885,362
Investments	115,376	113,099
Goodwill	765,806	603,446
Other intangible assets	50,292	40,084
Deferred debt issuance costs, net and other assets	19,313	17,667
Total assets	$ 2,220,265	$ 1,747,378
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 15,277	$ 4,885
Advance billings and customer deposits	31,933	25,934
Dividends payable	19,510	15,520
Accrued compensation	32,581	22,252
Accrued interest	6,784	3,524
Accrued expense	39,698	35,173
Current portion of long-term debt and capital lease obligations	9,849	9,751
Current portion of derivative liability	443	660
Total current liabilities	156,075	117,699
Long-term debt and capital lease obligations	1,356,753	1,212,134
Deferred income taxes	243,576	179,859
Pension and other postretirement obligations	122,367	75,754
Other long-term liabilities	14,581	9,593
Total liabilities	1,893,352	1,595,039
Commitments and contingencies		
Shareholders' equity:		
Common stock, par value $0.01 per share; 100,000,000 shares authorized, 50,364,579 and 40,065,246 shares outstanding as of December 31, 2014 and 2013, respectively	504	401
Additional paid-in capital	357,139	148,433
Retained earnings	–	–
Accumulated other comprehensive loss, net	(35,556)	(1,000)
Noncontrolling interest	4,826	4,505
Total shareholders' equity	326,913	152,339
Total liabilities and shareholders' equity	$ 2,220,265	$ 1,747,378

See accompanying notes.

Attachment 3

Percentage of Equity in Capital Structure	Calculated Rate of Return as Equity Structure Increases
50% Equity Ratio	12.00%
60% Equity Ratio	13.30%
70% Equity Ratio	14.60%
80% Equity Ratio	15.90%
90% Equity Ratio	17.20%
100% Equity Ratio	18.50%

Type of Capital	Interest Rate	Capital Structure	Weigted Cost
Cost of Debt	5.5%	50%	2.75%
Cost of Equity	18.5%	50%	9.25%
			12.00%
Cost of Debt	5.5%	40%	2.20%
Cost of Equity	18.5%	60%	11.10%
			13.30%
Cost of Debt	5.5%	30%	1.65%
Cost of Equity	18.5%	70%	12.95%
			14.60%
Cost of Debt	5.5%	20%	1.10%
Cost of Equity	18.5%	80%	14.80%
			15.90%
Cost of Debt	5.5%	10%	0.55%
Cost of Equity	18.5%	90%	16.65%
			17.20%
Cost of Debt	5.5%	0%	0.00%
Cost of Equity	18.5%	100%	18.50%
			18.5%

Attachment 4

Company	2010	2011	2012	2013	2014	5-Year Average Equity
Calaveras	51.40%	55.50%	55.20%	56.90%	60.10%	**55.82%**
Cal-Ore	N/A	N/A	N/A	N/A	N/A	**N/A**
Ducor	60.80%	63.10%	61.80%	56.50%	54.00%	**59.24%**
Foresthill	41.90%	39.60%	42.60%	41.10%	46.60%	**42.36%**
Kerman	52.30%	52.30%	51.30%	46.20%	49.10%	**50.24%**
Ponderosa	60.39%	62.82%	62.54%	59.86%	63.92%	**61.90%**
Pinnacles	N/A	N/A	N/A	N/A	N/A	**N/A**
Sierra	62.30%	63.90%	63.60%	70.50%	68.50%	**65.76%**
Siskiyou	N/A	N/A	N/A	N/A	N/A	**N/A**
Volcano	55.99%	62.89%	61.44%	64.37%	66.67%	**62.27%**
Average						**56.80%** [52]

[52] The applicants provided source data on capital structure in Exhibit C of A.15-09-005.

Attachment 5

Calaveras

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	5,659,346	39.90%	4.50%	1.80%
Equity (See Note)	8,513,358	60.10%	13.64%	8.20%
Totals	14,172,704	100.00%		10.00%
Proposed ROR				14.60%
Less Weighted Debt				12.80%
Divided by Actual Equity				21.30%

Cal-Ore

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	-	0.00%	0.00%	0.00%
Equity (See Note)	17,560,657	100.00%	10.00%	10.00%
Totals	17,560,657	100.00%		10.00%
Proposed ROR				14.60%
Less Weighted Debt				14.60%
Divided by Actual Equity				14.60%

Ducor

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	2,604,140	46.00%	5.10%	2.30%
Equity (See Note)	3,061,029	54.00%	14.26%	7.70%
Totals	5,665,169	100.00%		10.00%
Proposed ROR				14.60%
Less Weighted Debt				12.30%
Divided by Actual Equity				22.78%

Foresthill

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	9,259,383	53.40%	4.77%	2.50%
Equity (See Note)	8,065,319	46.60%	16.09%	7.50%
Totals	17,324,702	100.00%		10.00%
Proposed ROR				14.60%
Less Weighted Debt				12.10%
Divided by Actual Equity				25.97%

Kerman

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	11,364,864	50.90%	3.66%	1.90%
Equity (See Note)	10,967,000	49.10%	16.50%	8.10%
Totals	22,331,864	100.00%		10.00%
Proposed ROR				14.60%
Less Weighted Debt				12.70%
Divided by Actual Equity				25.87%

Ponderosa

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	21,934,990	36.08%	2.93%	1.06%
Preferred Stock	792,720	1.30%	6.00%	0.08%
Equity (See Note)	38,068,157	62.62%	14.16%	8.86%
Totals	60,795,867	100.00%		10.00%
Proposed ROR				14.60%
Less Weighted Debt				13.54%
Divided by Actual Equity				21.63%

Pinnacles

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	-	0.00%	0.00%	0.00%
Preferred Stock	70,000	2.35%	5.00%	0.12%
Equity (See Note)	2,911,150	97.65%	10.12%	9.88%
Totals	2,981,150	100.00%		10.00%
Proposed ROR				14.86%
Less Weighted Debt				14.86%
Divided by Actual Equity				15.22%

Sierra

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	14,304,846	31.50%	5.53%	1.70%
Equity (See Note)	31,088,208	68.50%	12.12%	8.30%
Totals	45,393,054	100.00%		10.00%
Proposed ROR				14.60%
Less Weighted Debt				12.90%
Divided by Actual Equity				18.83%

Siskiyou

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	-	0.00%	0.00%	0.00%
Preferred Stock	418,000	0.70%	5.75%	0.04%
Equity (See Note)	59,602,160	99.30%	10.03%	9.96%
Totals	60,020,160	100.00%		10.00%
Proposed ROR				14.86%
Less Weighted Debt				14.86%
Divided by Actual Equity				14.96%

Volcano

	Amount	Percent Capital	Cost of Capital	Weighted Cost of Capital
Debt	11,688,418	33.33%	5.20%	1.73%
Preferred Stock	1,295,250	3.69%	7.00%	0.26%
Equity (See Note)	22,085,190	62.98%	12.72%	8.01%
Totals	35,068,858	100.00%		10.00%
Proposed ROR				14.60%
Less Weighted Debt				12.87%
Divided by Actual Equity				20.43%

Attachment 6

Cost of Capital for Ratemaking Purposes
Independent Small LECs, A.15-09-005
Response to ORA's First Set of Data Requests, Request No. 1 (a), (d), and (e),
October 26, 2015

Calaveras Telephone Company (U 1004 C) ("Calaveras"), Cal-Ore Telephone Co. (U 1006 C) ("Cal-Ore"), Ducor Telephone Company (U 1007 C) ("Ducor"), Foresthill Telephone Co. (U 1009 C) ("Foresthill"), Kerman Telephone Co. (U 1012 C) ("Kerman"), Pinnacles Telephone Company (U 1013 C) ("Pinnacles"), The Ponderosa Telephone Co. (U 1014 C) ("Ponderosa"), Sierra Telephone Company, Inc. (U 1016 C) ("Sierra"), The Siskiyou Telephone Company (U 1017 C) ("Siskiyou") and Volcano Telephone Company (U 1019 C) ("Volcano") (collectively, the "Independent Small LECs") hereby respond to the Office of Ratepayer Advocates' First Set of Data Requests ("ORA Set 1"), Request No. 1 (a), (d), and (e).

The Independent Small LECs have undertaken a good faith review of the questions in ORA Set 1, and hereby respond to Request No. 1 (a), (d), and (e) subject to general objections presented below and any specific objections provided with the individual responses. Responses to subparts (b) and (c) will be provided by October 30, 2015 after the Independent Small LECs have a reasonable opportunity to review and gather documents needed to prepare a response.

GENERAL OBJECTIONS

The Independent Small LECs object to the requested October 20, 2015 deadline for the responses as unreasonable and overly burdensome because the Data Requests were not served on the Independent Small LECs until October 12, 2015. As counsel for the Independent Small LECs informed ORA's counsel by email dated October 16, 2015, October 20th is not a reasonable timeline for response given the detailed, documentary nature of some of the requests. As explained in that email, the Independent LECs are now responding to sub-parts (a), (d), and (e), which is ten business days from the date of ORA's request. As to sub-parts (b) and (c), the Independent LECs require additional time to gather and summarize the requested information. That information will be provided by October 30, 2015.

The Independent Small LECs object to the questions in ORA Set 1 to the extent that they call for irrelevant information that is beyond the scope of this proceeding or which is otherwise not reasonably calculated to lead to admissible evidence in this proceeding. The Independent Small LECs object to ORA Set 1 to the extent that the questions are interpreted to impose unreasonable burdens on the Independent Small LECs and/or to the extent that the questions request information that is not within the Independent Small LECs' possession, custody, or control. The Independent Small LECs further object to this set of requests to the extent that it calls for information protected by

attorney-client privilege, work product privilege, and/or any other applicable protection or privilege. The Independent Small LECs also object to ORA Set 1 to the extent that it is vague, ambiguous, or reliant upon vague or ambiguous instructions or definitions. The Independent Small LECs object to this set of requests to the extent that the questions are outside of the California Public Utilities Commission's ("Commission") jurisdiction or the proper scope of this proceeding.

The Independent Small LECs specifically object to any instructions or definitions in ORA Set 1 to the extent that they purport to impose any obligations greater than those provided by the applicable rules and decisions of the Commission, the California Code of Civil Procedure or California Evidence Code, and any other statutes, orders, rules or laws governing the proper scope and extent of discovery in California and this proceeding, including, without limitation, the instructions requesting that the Independent Small LECs serve verified responses, treat each request as continuing in nature, and produce documents in certain formats.

The Independent Small LECs also specifically object to the instructions as unduly burdensome and beyond the scope of reasonable discovery to the extent they request that the Independent Small LECs identify the person providing the answer to each data request and his/her contact information. The responses to the Data Requests are not offered on behalf of specific witnesses, but are offered on behalf of each of the ten Independent Small LECs. The Independent Small LECs are applicants in this proceeding, not any of their specific witnesses, employees, or representatives.

Subject to and without waiving the above objections, the Independent Small LECs respond as set forth below. The Independent Small LECs reserve the right to offer additional objections and/or supplemental responses to ORA Set 1 at any time and further reserve the right to challenge the relevance and/or admissibility of the information provided herewith to the issues in the proceeding.

SPECIFIC OBJECTIONS AND RESPONSES

DATA REQUEST NO. 1. The workpaper *Exhibit C to Cost of Capital Application* submitted by the applicants includes the outstanding debt by issue, the interest rate by issue, and a representation of the annual interest payments by issue (identified in Column I as "Rate times Amount") as of December 31, 2014 for each of the ten Independent Small LECs.

(a) Provide all loan payment schedules to date for each company with outstanding debt.

Objections: The Independent Small LECs object to the term "loan payment schedules" as vague and ambiguous. The Independent Small LECs also object to this request as unreasonably burdensome to the extent it is interpreted to require the Independent Small LECs to prepare documents that do not already exist.

Response: As ORA is aware, three of the applicant companies do not have any outstanding debt: Siskiyou, Cal-Ore, and Pinnacles. For the remaining companies, each of whom have some debt, information responsive to this question is provided in the attachment provided herewith labeled as "ORA 1(a) (Loan Payment Schedules)." This document contains a spreadsheet building upon the loan information provided in Attachment A to the Independent Small LECs' September 16, 2015 letter to ORA providing information responsive to ORA's data requests prior to the initiation of this proceeding. As reflected in "ORA 1(a) (Loan Payment Schedules)," loan payments are either made quarterly or monthly depending on the type of loan involved. All monthly loan payments are due by the last day of each month. All quarterly loan payments are due on the following dates of the year: February 28, May 31, August 31, and November 30. Additional information responsive to this question is provided in the attachment.

(b) Provide proof of payment of total interest expense in 2014 for each company and complete Column [b] in the following table indicating the total interest amount paid in 2014 for which proof of payment is provided (indicate "n/a" where a company had no outstanding debt as of December 31, 2014).

Total 2014 Interest Payments		
column [a]	**column [b]**	**column [c]**
Company	**Supported by Proof of Payment**	**Per *Exhibit C to Cost of Capital Application***
Calveras		$254,646
Cal-Ore		n/a
Ducor		$132,527
Foresthill		$441,650
Kerman		$415,646
Ponderosa		$643,349
Pinnacles		n/a
Sierra		$790,376
Siskyou		n/a
Volcano		$608,204

Response: Information responsive to this question will be provided on October 30, 2015.

(c) For each company, explain any and all differences between amounts reported in Column [b] and those shown in Column [c] in the above table.

Response: Information responsive to this question will be provided on October 30, 2015.

(d) For each company, provide copies of all pending loan applications. (This is a continuing request and information responsive to this request should be provided at any point such information becomes available during A.15-09-005.

Objections: The Independent Small LECs object to this question to the extent that it purports to impose a continuing demand on the Independent Small LECs, in excess of proper discovery.

Response: None of the companies has any pending loan application with RUS or any other lending institution. However, some companies have unused authority to draw RUS funds pursuant to previously-approved loans. Notwithstanding the Independent Small LECs' objection to ORA's attempt to impose a continuing discovery demand, the Independent Small LECs will use their best efforts to inform ORA of any new loan applications from any of the Independent Small LECs during the pendency of this proceeding.

(e) For each company, identify all loan requests that have been denied since January 1, 2010.

Objections: The Independent Small LECs object to this request on the grounds that the information sought is for an irrelevant and unreasonable time period that is not necessarily probative of the availability of debt capital today or the likely availability of debt capital over the period during which the Independent Small LECs upcoming rate cases will be adjudicated.

Response: None of the Independent Small LECs has had a loan request denied from January 1, 2010 to the present. However, some companies have encountered difficulties and delays in obtaining loans from RUS within a reasonable time period. The Independent Small LECs also note that, as discussed in Mr. Balhoff's testimony submitted contemporaneously with Application 15-09-005, there are strong signals amongst lenders that debt capital is becoming more difficult to obtain. The fact that this trend has not resulted in loan denials for the Independent Small LECs in the timeframe identified by this question does not mean that such denials will not happen in the future. This possibility will increase if reasonable revenue requirements are not set in rate cases during the next round of rate cases. In fact, if results are reached in future or pending rate cases that materially harm the financial condition of a given Independent Small LEC, those harms could compromise access to existing debt capital associated with loans that have already been approved.

Attachment 7

Applicant Cost of Capital

Calaveras Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	4.50%	1.35%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**14.30%**

Applicant Cost of Capital

Cal-Ore Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	4.53%	1.36%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**14.31%**

Applicant Cost of Capital

Ducor Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	5.10%	1.53%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**14.48%**

Applicant Cost of Capital

Foresthill Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	4.77%	1.43%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**14.38%**

Applicant Cost of Capital

Kerman Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	3.66%	1.10%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**14.05%**

Applicant Cost of Capital

Pinnacles Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	4.53%	1.36%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**14.31%**

Applicant Cost of Capital

Ponderosa Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	2.96%	0.89%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**13.84%**

Applicant Cost of Capital

Siskiyou Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	4.53%	1.36%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**14.31%**

Applicant Cost of Capital

Sierra Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	5.53%	1.66%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**14.61%**

Applicant Cost of Capital

Volcano Imputed Cap Structure / Actual Debt Cost/ Req ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	30.00%	5.20%	1.56%
Equity	70.00%	18.50%	12.95%
TOTAL	100.00%		**14.51%**

Attachment 8

ORA Recommended Cost of Capital

Calaveras Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	44.18%	4.50%	1.99%
Equity	55.82%	8.79%	4.91%
TOTAL	100.00%		**6.89%**

ORA Recommended Cost of Capital

Cal-Ore Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	43.18%	4.53%	1.96%
Equity	56.82%	8.79%	4.99%
TOTAL	100.00%		**6.95%**

ORA Recommended Cost of Capital

Ducor Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	40.76%	5.10%	2.08%
Equity	59.24%	8.79%	5.21%
TOTAL	100.00%		**7.29%**

ORA Recommended Cost of Capital

Foresthill Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	57.64%	4.77%	2.75%
Equity	42.36%	8.79%	3.72%
TOTAL	100.00%		**6.47%**

ORA Recommended Cost of Capital

Kerman Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	49.76%	3.66%	1.82%
Equity	50.24%	8.79%	4.42%
TOTAL	100.00%		**6.24%**

ORA Recommended Cost of Capital

Pinnacles Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	43.18%	4.53%	1.96%
Equity	56.82%	8.79%	4.99%
TOTAL	100.00%		**6.95%**

ORA Recommended Cost of Capital

Ponderosa Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	38.10%	2.93%	1.12%
Equity	61.90%	8.79%	5.44%
TOTAL	100.00%		**6.56%**

ORA Recommended Cost of Capital

Siskiyou Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	43.18%	4.53%	1.96%
Equity	56.82%	8.79%	4.99%
TOTAL	100.00%		**6.95%**

ORA Recommended Cost of Capital

Sierra Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	34.24%	5.53%	1.89%
Equity	65.76%	8.79%	5.78%
TOTAL	100.00%		**7.67%**

ORA Recommended Cost of Capital

Volcano Actual 5-Yr Avg Cap Structure / Debt Cost/ ORA ROE

Description	Capital Structure	Cost	Weighted Cost
Long Term Debt	37.73%	5.20%	1.96%
Equity	62.27%	8.79%	5.47%
TOTAL	100.00%		**7.44%**

Attachment 9

Collected 10/22/2015				
FY 6/2015		**ROA**	**ROE**	**Beta**
	AT&T	2.72%	6.20%	0.54
	TDS	-0.01%	1.30%	0.67
	CNSL	3.34%	-5.15%	0.8
	NULM	2.36%	4.47%	0.1
	SHEN	7.03%	14.08%	0.8
	LMOS	4.76%	23.71%	0.92
	ALTV	-5.04%	-11.40%	0.5
	WIN	2.37%	-34.22%	-0.25
	ALSK	-1.00%	5.45%	-0.81
	HCOM	2.22%	1.57%	1.41
	FRP	-0.92%	n/a	0.6
	CBB	3.39%	n/a	1.42
	VZ	5.52%	71.57%	0.59
	FTR	3.10%	-0.460%	0.69
	Average	2.13%	6.43%	0.57

Attachment 10

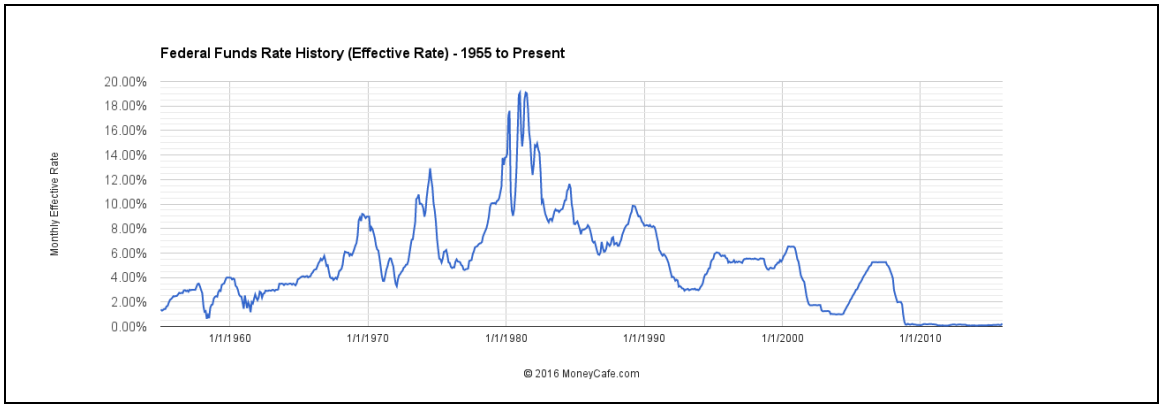
Applicant		net regulated plant	current $ - return	new $ - return	$ increase	
Calaveras Fixed Assets		$ 12,120,572	$ 1,212,057	$ 1,769,604	$ 557,546	
Cal-Ore		$ 8,385,071	$ 838,507	$ 1,224,220	$ 385,713	
Ducor		$ 4,699,866	$ 469,987	$ 686,180	$ 216,194	
Foresthill		$ 17,993,000	$ 1,799,300	$ 2,626,978	$ 827,678	
Kerman		$ 23,135,512	$ 2,313,551	$ 3,377,785	$ 1,064,234	
Pinnacles		$ 800,431	$ 80,043	$ 116,863	$ 36,820	
Ponderosa		$ 22,073,481	$ 2,207,348	$ 3,222,728	$ 1,015,380	
Sierra Telephone		$ 55,390,850	$ 5,539,085	$ 8,087,064	$ 2,547,979	
Siskiyou Telephone		$ 57,200,000	$ 5,720,000	$ 8,351,200	$ 2,631,200	
Volcano		$ 23,139,225	$ 2,313,923	$ 3,378,327	$ 1,064,404	
					$ 10,347,148	total

ORA		net regulated plant	current $ - return	new $ - return	$ decrease	
Calaveras Fixed Assets		$ 12,120,572	$ 1,212,057	$ 835,674	$ (376,383)	
Cal-Ore		$ 8,385,071	$ 838,507	$ 582,794	$ (255,713)	
Ducor		$ 4,699,866	$ 469,987	$ 342,430	$ (127,556)	
Foresthill		$ 17,993,000	$ 1,799,300	$ 1,164,664	$ (634,636)	
Kerman		$ 23,135,512	$ 2,313,551	$ 1,443,034	$ (870,517)	
Pinnacles		$ 800,431	$ 80,043	$ 55,633	$ (24,410)	
Ponderosa		$ 22,073,481	$ 2,207,348	$ 1,447,433	$ (759,915)	
Sierra Telephone		$ 55,390,850	$ 5,539,085	$ 4,250,570	$ (1,288,515)	
Siskiyou Telephone		$ 57,200,000	$ 5,720,000	$ 3,975,615	$ (1,744,385)	
Volcano		$ 23,139,225	$ 2,313,923	$ 1,720,515	$ (593,407)	
					$ (6,675,438)	total

Attachment 11

Applicants' 5-Year Average ROR (2010 - 2014)	**9.449%**
ORA Calculation From Attachment A to COC Letter	
Applicants' 5-Year Average ROR (2009 - 2013)	**9.499%**
ORA Calculation From Company Annual Reports	

Attachment 12



Attachment 13

ROE Estimates		
	Avg Balhoff	**ORA CAPM**
Risk-free rate	5.80%	2.91%
Equity risk premium	6.39%	5.88%
Base or market equity cost of capital	12.19%	8.79%
Industry-adjusted premium	0.377%	n/a
Size-premium to CAPM (1963-2014)	6.37%	n/a
Total Estimated cost of equity	18.94%	8.79%